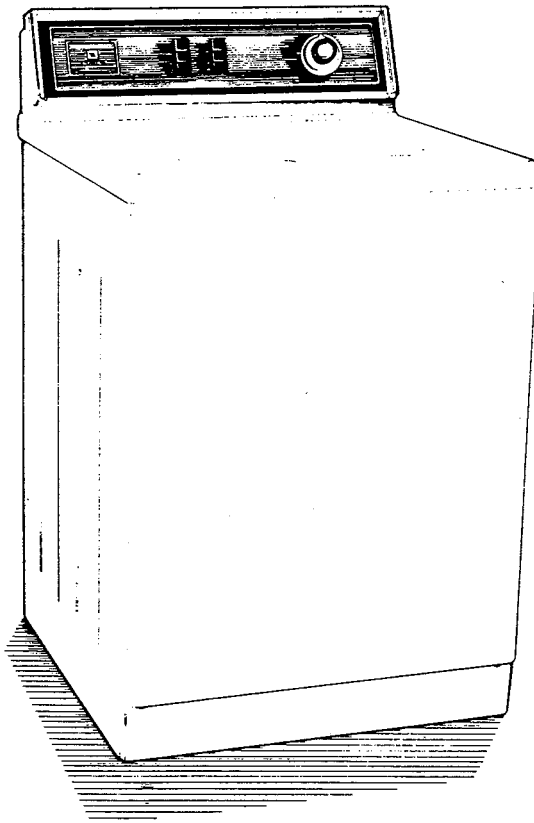


56283



**MAYTAG**  
®

# **AUTOMATIC WASHER SERVICE MANUAL**



**Covering:**

**"08"-"10"-"12"  
Models**

This manual is intended for experienced service personnel. Servicing electrical circuits can be hazardous. Use all caution if "live" tests are performed. This manual should be used with the electrical-mechanical troubleshooting guide.

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# INTRODUCTION

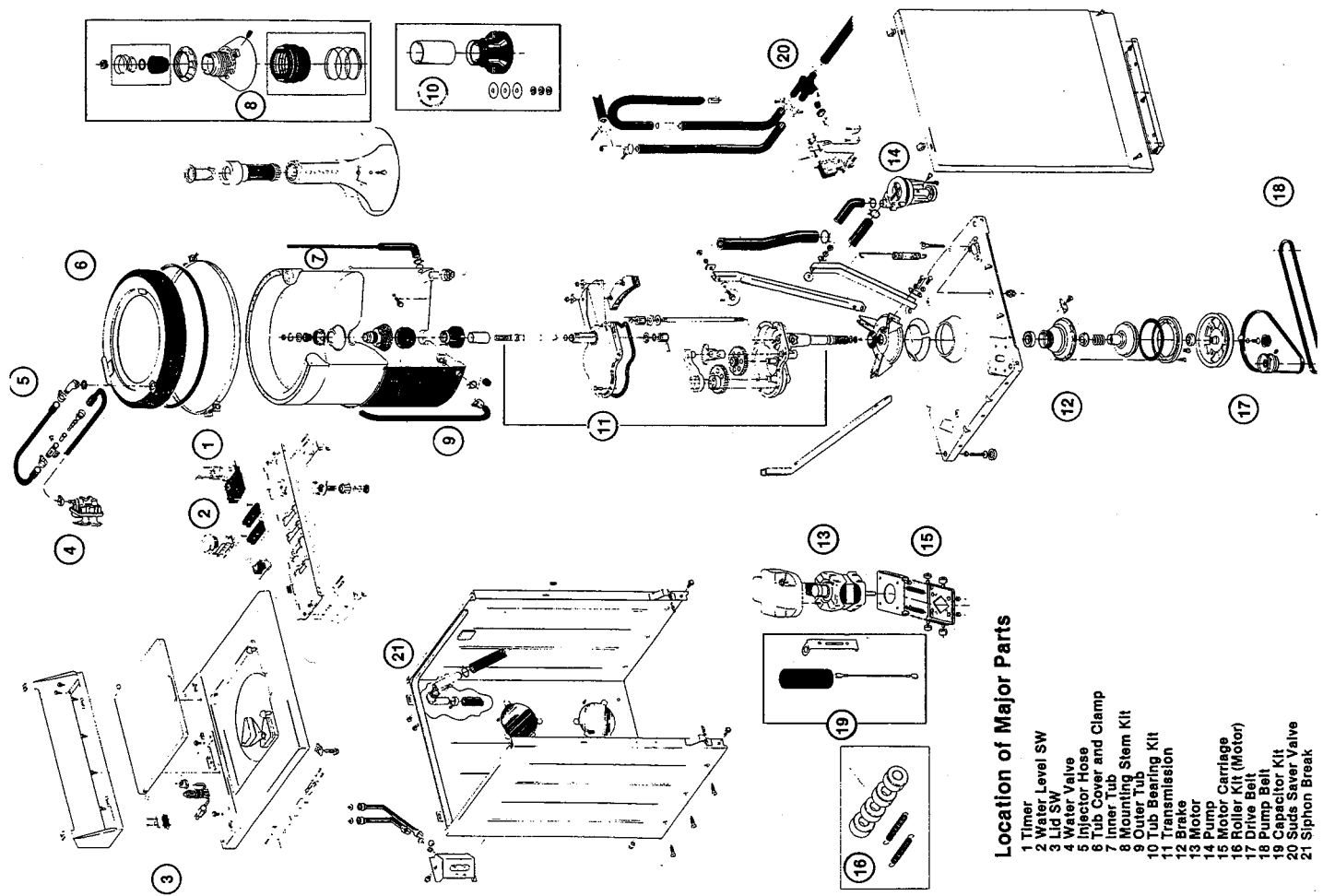
*This service manual, along with the Mechanical-Electrical Test Guide (Part Number 56186) is intended to assist you in diagnosing conditions and replacing components on "08", "10", and "12" line models manufactured since 1976.*

*This manual is designed for the technician who is familiar with the operation and construction of Maytag products.*

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# Location of Major Parts

- 1 Timer
- 2 Water Level SW
- 3 Lid SW
- 4 Water Valve
- 5 Injector Hose
- 6 Tub Cover and Clamp
- 7 Inner Tub
- 8 Mounting Stem Kit
- 9 Outer Tub
- 10 Tub Bearing Kit
- 11 Transmission
- 12 Brake
- 13 Motor
- 14 Pump
- 15 Motor Carriage
- 16 Roller Kit (Motor)
- 17 Drive Belt
- 18 Pump Belt
- 19 Capacitor Kit
- 20 Suds Saver Valve
- 21 Siphon Break



## Using Electrical Test Equipment

### 38559 MAYTAG APPLIANCE TEST METER

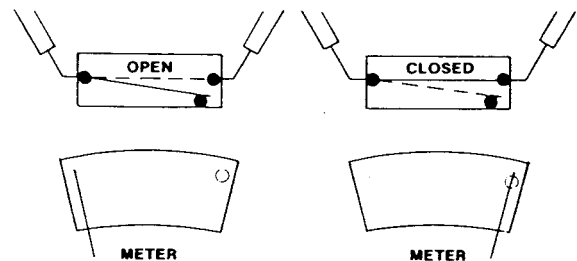


38559 APPLIANCE TEST METER

The Maytag appliance test meter is a multi-purpose tester combining an AC-DC voltage tester with a multi-range ohmmeter.

The obvious advantages of being able to check electrical components and circuits without power applied is one of the features of the ohmmeter. Multiple ranges allow accurate determination of resistances of both single components (such as water valve coils) and entire circuit paths. Resistance is measured in "ohms".

For the most part, we will only be concerned with continuity. Is there a path or not? References are made between a "closed" (continuity) reading and an "open" (no continuity) reading. One note, when you get an "open" reading, try a higher resistance range (setting). A very high resistance appears as an "open" on the lower ranges. For best accuracy always "rezero" meter when changing ranges and/or the physical position of an ohmmeter.



**CAUTION:** Always be sure the power has been disconnected before making resistance measurements. Failure to do so will result in damage to your meter! Internal batteries provide all the power needed to make resistance checks. They should be checked at least once a year and replaced as needed.

When checking components, external wiring should be disconnected to eliminate false readings through external paths.

#### SET METER FOR USE AS FOLLOWS:

1. Calibrate meter by touching test probes together and turning adjusting dial until meter reads "0" on green (top) scale. Re-check calibration whenever adjusting dial for ohms setting is changed. (Replace battery if adjustment will not bring meter reading to "0".)

2. Select the scale most easily read and place test probes on respective terminals. When checking a switch, the reading would normally be either open or closed. A reading of 70 on the R x 10 scale would for example be 700 ohms resistance.

The following chart shows typical resistance values for some of the components found on Maytag automatic washers.

### **Water Valve Solenoid Coil**

New style small diameter coil 500-900 ohms.

**NOTE:** The higher the resistance, the lower the coil wattage.

**Timer Motors** 1100-3000 Ohms

**Diverter Valve Solenoid** 10 Ohms

### **Motor Windings**

Main Winding - Regular Speed	2 Ohms
Main Winding - Slow Speed	3 Ohms
Start Winding	4 Ohms

These resistances are not meant to be used as the exact values to determine whether a component is good or bad. They are provided so that you may have an idea of the resistance that you can see in testing components on Maytag automatic washers.

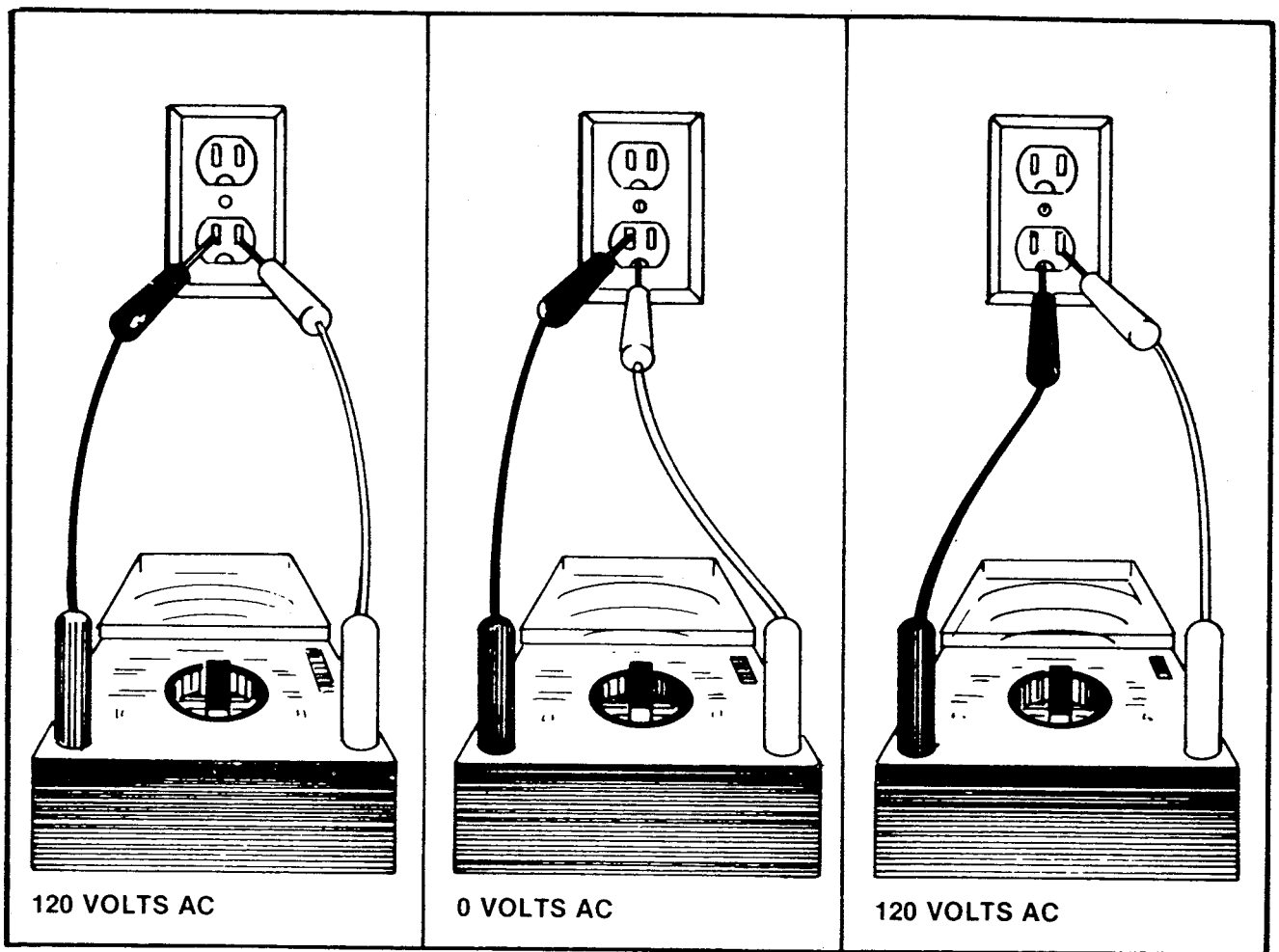
## **VOLTAGE CHECKS**

For the most part, these checks will consist of taking readings at the wall receptacle in order to determine the availability of voltage to the products. Voltage checks on individual components of a product are not recommended due to the possibility of electrical shock. Component part testing is best accomplished through continuity checks with a 38559 Maytag appliance test meter.

**NOTE:** Use of the meter on voltage higher than the indicated range may cause permanent damage to the meter. To prevent damage, first select highest range and then lower the range for readings which fall within the lower scale.

### **SET UP METER FOR USE AS FOLLOWS:**

1. Turn selector knob to desired meter function and appropriate range.
2. Plug black lead into socket marked (—) (black).
3. Plug red lead into socket marked (+) (red).
4. Place test leads into receptacle in order to determine voltage available.



For your safety and to protect the test equipment, be sure that the wall outlet is properly polarized and grounded. Information regarding electrical requirements will be found on Pages 5-15 through 5-16

## USING VOLTMETER AS A CONTINUITY TESTER

While we normally think of continuity testing as only an ohmmeter function, a voltmeter can also be used. The primary difference is that power is applied to the circuit under test and appropriate caution must be exercised.

The voltmeter is connected across the component terminals with the wires still in place and with power disconnected. The meter is set for the 300-volt range and power is reconnected. A voltage reading indicates a voltage drop across the component. There should be **no voltage drop** across closed switch contact or fuses.

The voltmeter connected across the thermostat terminal, as an example, will show no reading when the thermostat is calling for heat and will show line voltage when the thermostat cycles.

This type of continuity testing is an excellent method of locating questionable switch contacts. Any voltage drop across closed switch contacts indicates poor electrical contact. The resultant internal heating can shorten component life.

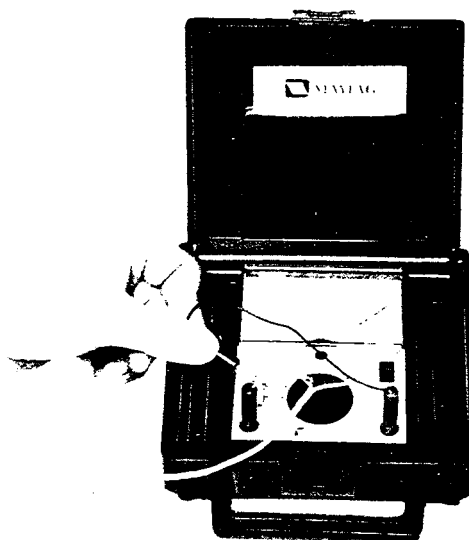
## USING METER— TEMPERATURE READINGS (50° TO 300° F.)

This is not adequate for calibrating ranges.

Water temperature readings are most accurate when the accessory temperature probe, (Part No. 38562) is lowered partially into a full tub of water (HOT—COLD-WARM).

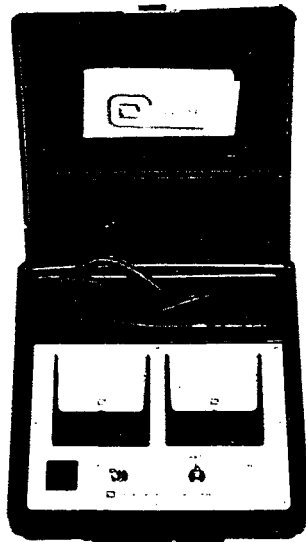
## SET UP METER FOR USE AS FOLLOWS:

1. Turn selector knob to TEMP.
2. Insert black negative lead of temperature probe into black socket marked (—) (negative).
3. Insert red positive lead of temperature probe into red socket marked (+) (positive).
4. To calibrate meter, touch black plug from red positive lead to black negative lead and turn calibration dial until needle aligns with CAL.



5. Probe is ready to use. Read blue scale on meter face marked TEMP.

# 38519 VOLT-WATTMETER



38519 MAYTAG  
Volt - Wattmeter

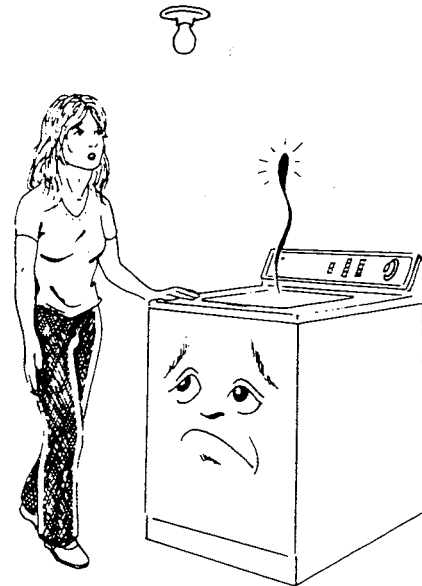
Since the Maytag volt-wattmeter reads true power consumed and line voltage, it is especially useful in pinpointing appliance malfunctions. Service diagnosis can often be made without removing so much as the first screw.

Each product has a "normal" wattage rating and this normal value is used as a basis for comparison with wattage readings being taken on a unit under test. Readings which are above the normal range of wattage consumption indicate an electrical problem or increased mechanical load on the mechanism being driven by the motor. Such things as worn parts or bearings will show up as high wattage draw.

Wattage readings which are lower than normal indicate the unit being checked is not doing the proper amount of work for which it is designed. As an example, a belt which slips excessively will not require the normal power from the motor, resulting in a low wattage reading.

Of equal importance is the ability of the power line to supply power without an excessive voltage drop. With the volt-wattmeter, both voltage and wattage draw can be observed at the same

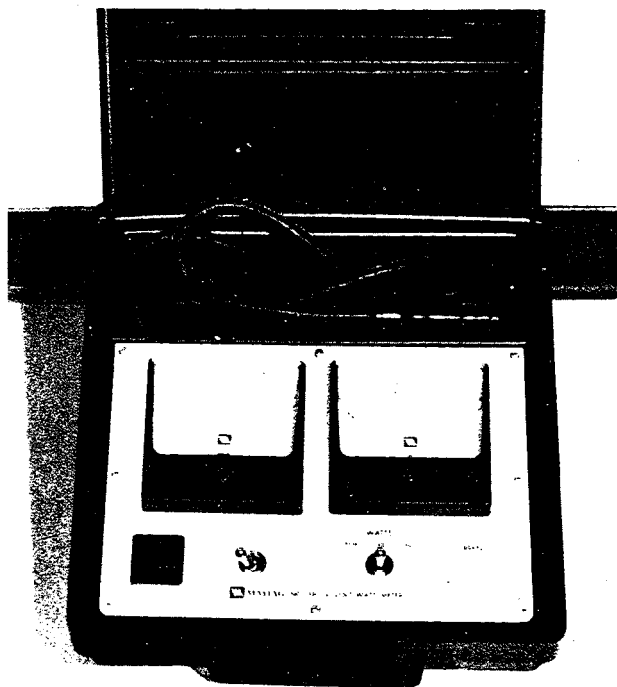
time, during the initial start phase of the unit. Voltage drops of 10% or less from the rated voltage are considered acceptable for proper unit operation. A line voltage drop in excess of 10% would indicate a wiring problem. Larger wiring to the outlet or the installation of a start capacitor in series with the drive motor may help solve this problem. Where power to the main circuit panel also drops during the start phase, the local power company should be consulted. A voltage drop is often indicated by dimming lights or slow starting of motors.



## SET UP METER FOR USE AS FOLLOWS:

1. Before connecting the meter to the power source and with instrument in its operating position, zero both meters. The zero adjusting screw is located at the lower center of each meter cover. Turn this screw either left or right until the needle rests over zero on the left edge of each meter scale. **NOTE:** Back off slightly from the final setting to minimize pressure on the zero adjusting mechanism.

This will extend the long term stability of the setting.

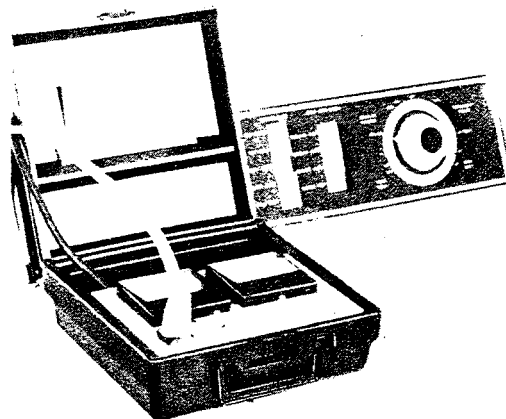


2. Set meter range toggle switches for expected voltage and wattage to be measured. You may want to refer to the normal wattage reading charts on Page 1-7 for a general idea of wattage switch settings. If in doubt, set switch to highest range and reset if voltage or wattage levels fall within a lower range.

**IMPORTANT:** When set for the 300-volt range, the wattmeter will not operate on the 0-500 watt setting. This is for the protection of the meter.

3. Plug the three- (3) wire polarized cord into a three- (3) wire properly polarized and grounded receptacle.

4. Plug the power cord of the unit being tested into the panel receptacle on the volt-wattmeter. Operate the unit being checked. The volt-meter will indicate voltage supplied to the unit while the wattmeter will indicate the true power being consumed.



Power surges such as that used in the starting of a motor will read high on the watts scale or possibly even "peg" the meter. This momentary surge is normal and the meter is designed to withstand this type of overload. After the initial starting surge is over, the meter reading will decrease as the power consumed is reduced.

The current capacity of the wattmeter is as follows:

- 40 Amps momentary (starting surge)
- 20 Amps intermittent (long enough to get a stable reading)
- 10 Amps continuous

Avoid overloading the meter by disconnecting it immediately if wattage readings are above safe levels. Loads up to 1200 watts may be connected through the instrument for an extended length of time. Loads measuring between 1200 and 2000 watts should be disconnected as soon as a reading can be made.

## WATTAGE READINGS IN EXCESS OF 2000 WATTS

Wattage beyond the range of the 38519 Maytag volt-wattmeter can be calculated by taking a current (amps) reading with the 38186 Maytag clamp-on ammeter, and then multiplying this reading by the measured applied voltage to the load.

A simple formula is used to calculate wattage (Watts = Amps x Volts).

**NOTE:** This formula does not take into consideration the power factor which will be a number of one or less and indicates the resistance versus reactive nature of the circuit. Fortunately, in most instances the load will be mainly resistive so that the calculated value will be meaningful.

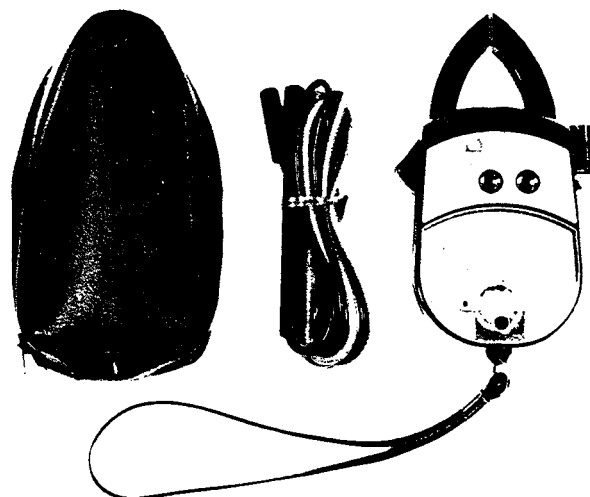
## WATTAGE CHART

The following chart shows normal wattages for Maytag automatic washers. The average reading we provide is based upon a line voltage of 120 volts.

	Average	Range
Agitate - Regular Full Tub	380 Watts	360-420 440 Max.
Agitate - Slow Full Tub	340 Watts	320-360 380 Max.
Spin Acceleration Empty Tub Regular Speed	600 Watts	580-640 660 Max.
Full Spin Speed Regular	380 Watts	350-400 420 Max.
Full Spin Speed Slow	350 Watts	330-380 400 Max.

**NOTE:** Wattage for the A806 which has a full back panel light will be approximately 40 watts higher.

## 38186 CLAMP-ON AMMETER



Each circuit in an appliance has a "normal" current draw which is an indication of the performance of that circuit. Current draw levels, less than or more than normal, give clues to malfunctions. The clamp-on ammeter measures these currents without breaking the circuit by measuring the strength of the magnetic field developed around each conductor. Current is read by separating the conductors and clamping the jaws of the ammeter around each conductor on which current is to be read. Low amperage readings indicate problems such as damaged heating elements, excess belt slippage, etc. High amperage readings indicate the unit being tested is operating under an increased mechanical or electrical load. Worn parts, bearing problems or low voltage, will show up as low amperage readings.

**NOTE:** Overloads on a circuit breaker or fuse can be traced to the product being tested or the circuit breaker (or fuse) by checking the product's current draw. If the amperage reading is less than the breaker reading, the breaker or fuse box is at fault.



## AMPERAGE CHART

Regular Agitation	Full Tub	6.0 Amps
Gentle Agitation	Full Tub	5.0 Amps
Regular Spin-Start	Water In Tub	6.5 Amps
Gentle Spin-Start	Water In Tub	5.5 Amps
Regular Spin	Full Speed Water Out	6.0 Amps
Gentle Spin	Full Speed Water Out	5.0 Amps

**NOTE:** A wattmeter reading will provide better information than an ammeter as it gives a more accurate indication and responds faster than an ammeter.

## VOLTAGE CHECKS WITH AMMETER

Voltage readings may be taken by using the leads supplied with the meter. The meter is preset to read on the 0-300 VAC scale but can be dropped down to 0-150 VAC range by depressing the red button on the side of the meter.

## 38183 MOTOR TEST CORD



The motor test cord may be used to electrically check operation of the drive motor while still installed in the unit. Testing of the motor in this manner merely determines whether or not it will run independently of other electrical components.

In order to make accurate motor tests, proper connection of the motor test cord is very important. Depending on the internal wiring in a motor, color codes for proper electrical connection may vary. With the aid of the following drawings, installation of the motor test cord may be done quickly and accurately.

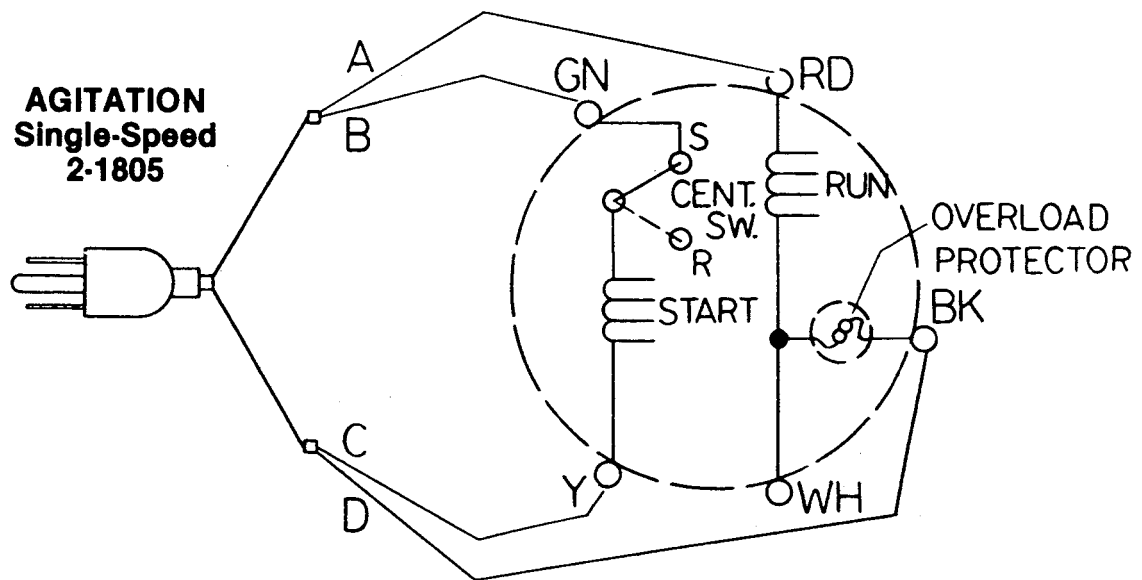
**NOTE:** Always plug test cord into a grounded receptacle.

# DRIVE MOTOR TEST - WASHERS

The motor may be checked in the washer or removed and checked on the bench.

## 2-1805 (2-1664) SINGLE SPEED - REVERSIBLE - DRIVE MOTOR

All four leads of the test cord are required to test the automatic washer drive motor. The following drawing shows installation of the test cord on the 2-1805 drive motor, (agitate cycle). Reversing the motor to spin is accomplished by reversing Wires B and C.



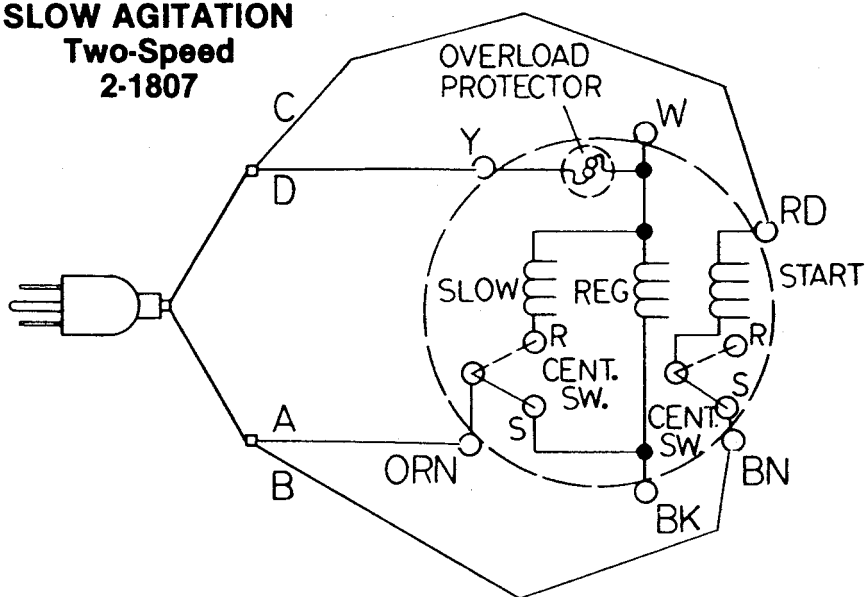
## 2-1807 (2-1666) TWO-SPEED - REVERSIBLE - DRIVE MOTOR

The following drawings and chart show the connections for the motor test cord on the 2-1807 drive motor, (agitate cycle).

### SLOW AGITATION

Two-Speed

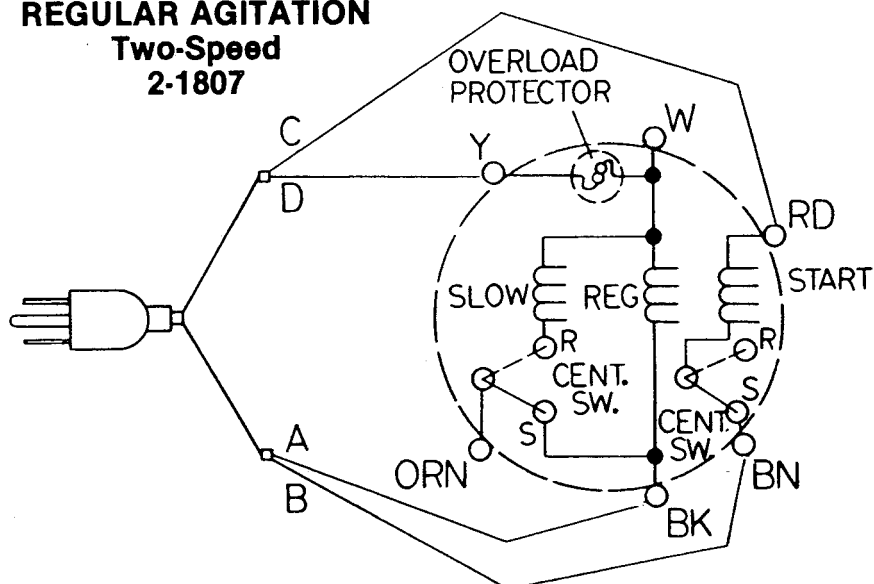
2-1807



### REGULAR AGITATION

Two-Speed

2-1807



Reversing the motor to spin is accomplished by reversing Wires B and C.



# Electrical-Mechanical Trouble Shooting

## WILL NOT FILL

### Washer will not fill or spin

**CAUTION:** Always disconnect power supply before making any continuity checks.

Is washer plugged in?

Open and close lid. This will reset unbalance mechanism in case it has tripped.

Pull out timer knob.

Check for blown fuse or tripped circuit breaker.

Check lid switch for continuity with lid closed. Model "08" and "10" only. No continuity between lid switch terminals adjust or replace switch.

Check timer line switch for continuity between timer terminals 17 and 7 on all "08" and "10" models. On Model "12" check L1 to 7.

### Washer will not fill for wash, but will spin

Set timer well into wash cycle.

Check to make sure water faucets are turned on.

Pull timer knob out.

Push water temperature selector buttons. If water flow results, follow procedure outlined under "Washer Will Not Fill For a Specific Water Temperature Selection".

↓  
Check water level switch  
for continuity between  
terminals 7-15 on switch.  
No continuity, replace  
switch.

→ Check  
Timer

## Washer will not fill for a specific water temperature selection

**CAUTION:** Always disconnect power supply  
before making any continuity checks.

Push temperature switch  
buttons to determine  
which water temperature  
is not available.

→ Check to make sure  
water faucet is turned  
on.

→ Remove hose at water valve  
and faucet. Check for restricted  
screen in water valve or inlet  
hose. Restricted screen,  
replace the screen.

↓  
Check continuity of  
water valve solenoid.  
No continuity, replace  
water valve.

## Washer overflows

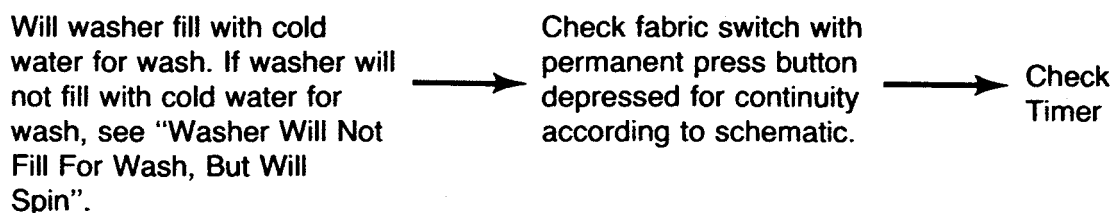
Unplug washer. If washer  
continues to fill, replace  
water valve. Should washer  
stop filling, proceed on.

→ Blow into the water level  
switch orifice until a click  
is heard. Retain air pres-  
sure and check continuity  
on switch terminals be-  
tween 7 and 16. No  
continuity replace water  
level switch.

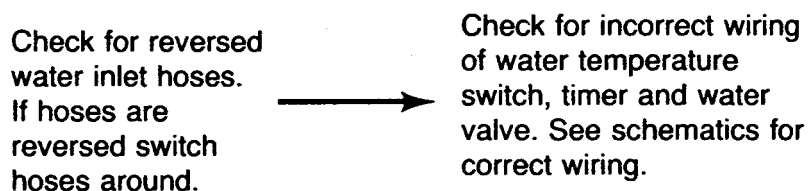
→ Examine air dome  
hose for air leaks.

↓  
Unlikely, but possible  
for an object to be  
blocking the air  
dome orifice in outer  
tub. Remove object.

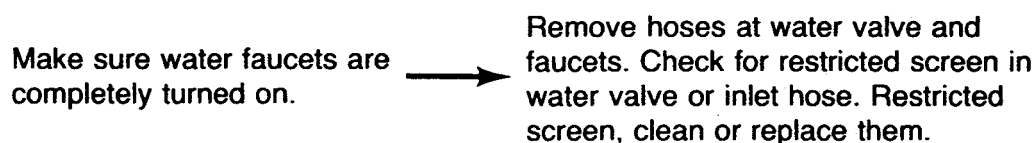
## No cool-down fill



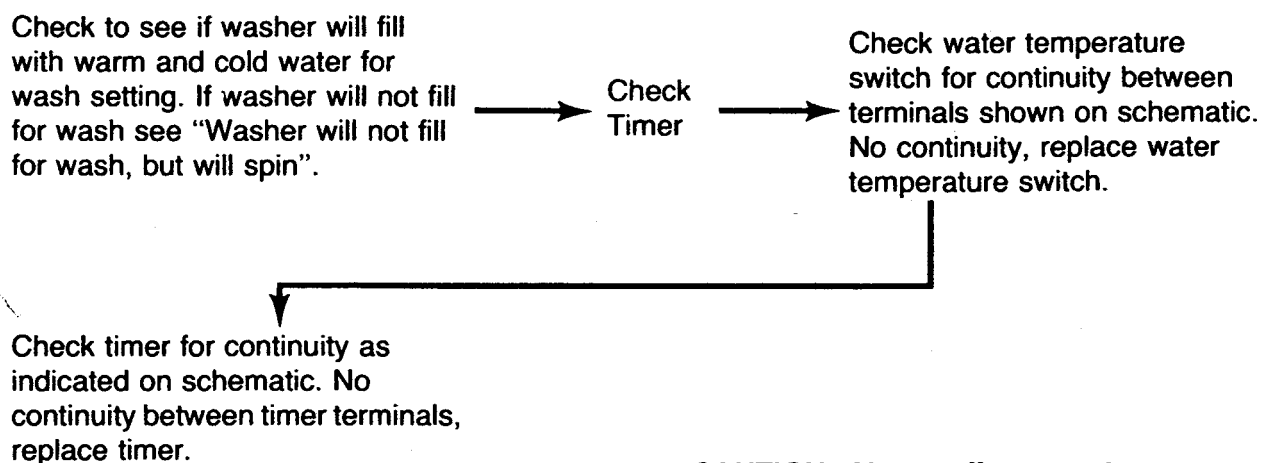
## Hot and cold water temperatures reversed



## Slow fill



## Washer will not fill for rinse cycle



**CAUTION: Always disconnect power supply before making any continuity checks.**

# WILL NOT AGITATE

## Fills okay, motor will not run

Water level switch. Check for continuity between terminals 7 and 16 on switch. No continuity, replace water level switch.

**CAUTION:** Always disconnect power supply before making any continuity checks.

Timer. Check Electrical Test Guide for terminal numbers.

Drive motor. Hook up motor test cord as shown in Electrical Test Equipment Section. If motor will not operate with test cord, replace motor.

Fabric switch (regular and permanent press).

Speed switch.

## Won't agitate - burns belts

### Pump belt burnt

Remove pump belt and turn pump pulley by hand. If pump pulley will not turn, check for an object caught in pump. If there is no object caught, pump bearing is frozen and pump will need to be replaced.

### Drive belt burnt

Check pump belt adjustment by pulling motor forward so drive belt is tight. Grasp the pump belt in the middle and with the belt tight there should be 1/4" between the inside surfaces of the pump belt. If not, adjust by moving the pump.

↓  
Check for binding motor carriage. If carriage is binding, clean upper and lower tracks. Replace motor rollers and springs and lubricate.

→ Remove drive belt and turn transmission pulley by hand counterclockwise (looking at it from the bottom). If pulley won't turn, the transmission is locked and will need to be serviced.

### Won't agitate - motor is running

Check to make sure drive belt is on.

→ Check to make sure motor pulley is not loose or off. Reinstall motor pulley and tighten set screw.

→ Remove drive belt. Turn drive pulley by hand counterclockwise (looking at it from the bottom). If it turns freely, but still won't allow agitator to oscillate, the transmission will need to be serviced.

### Won't agitate delicate cycle, Fabric-Matic Models

Delicate cycle consists of brief periods of agitation and soaks. See schematics.

**CAUTION: Always disconnect power supply before making any continuity checks.**

### Slow agitation

### Wattage below normal

Check washer wattage draw with a full tub of water. Wattage should fall between 360 and 420 watts.

→ Drive belt is slipping excessively. Check pump belt adjustment by pulling motor forward so drive belt is tight. Grasp the pump belt in the middle and with the belt tight, there should be 1/4" between the inside surface of the pump belt. If not adjust by moving pump.



↓  
Drive belt slipping excessively. Motor carriage is binding. Clean carriage, replace motor rollers and springs. Lubricate motor carriage.

→ High wattage. Oil thick in transmission (above 60°F.). Change oil.

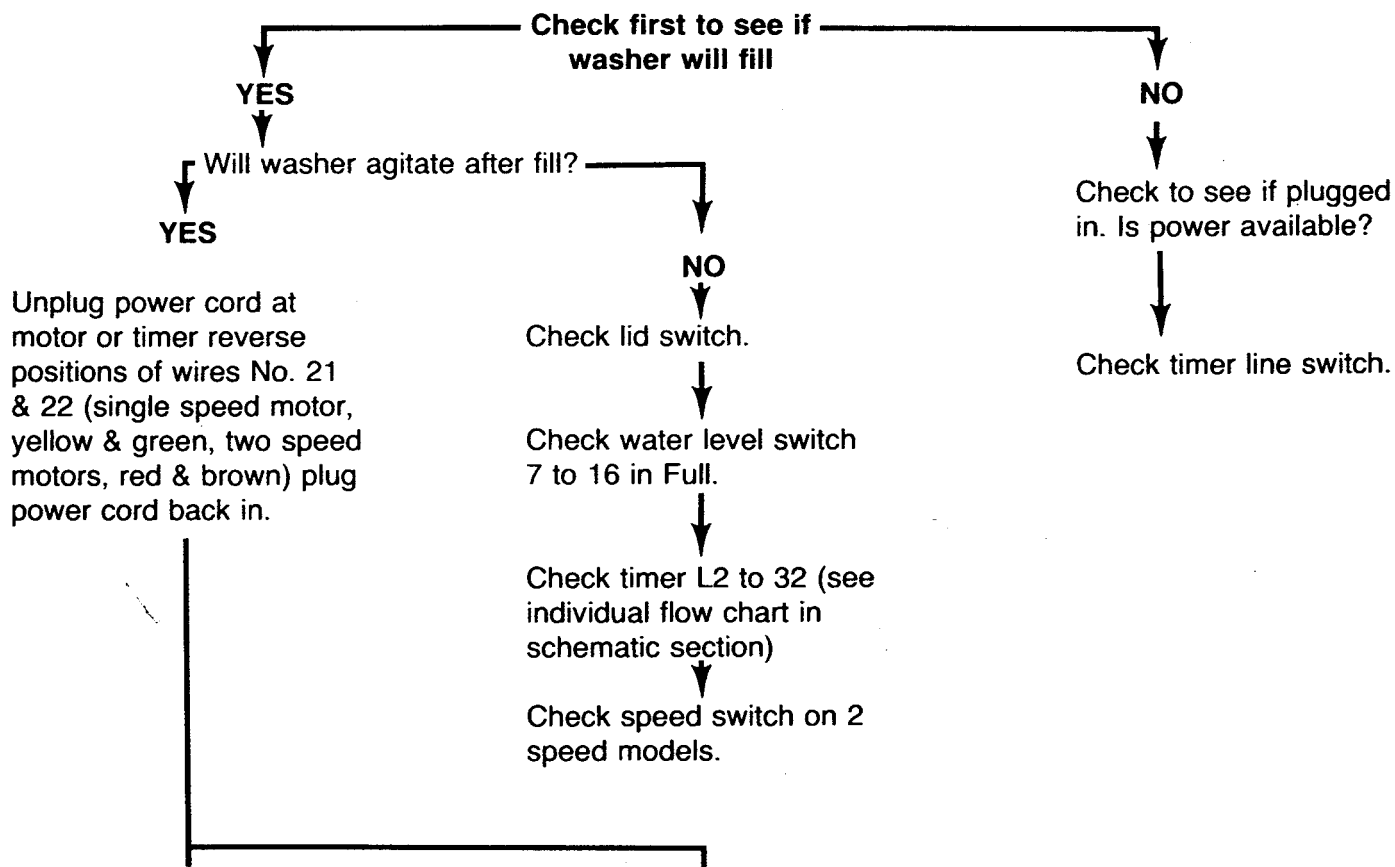
## Agitates continuously - timer won't advance

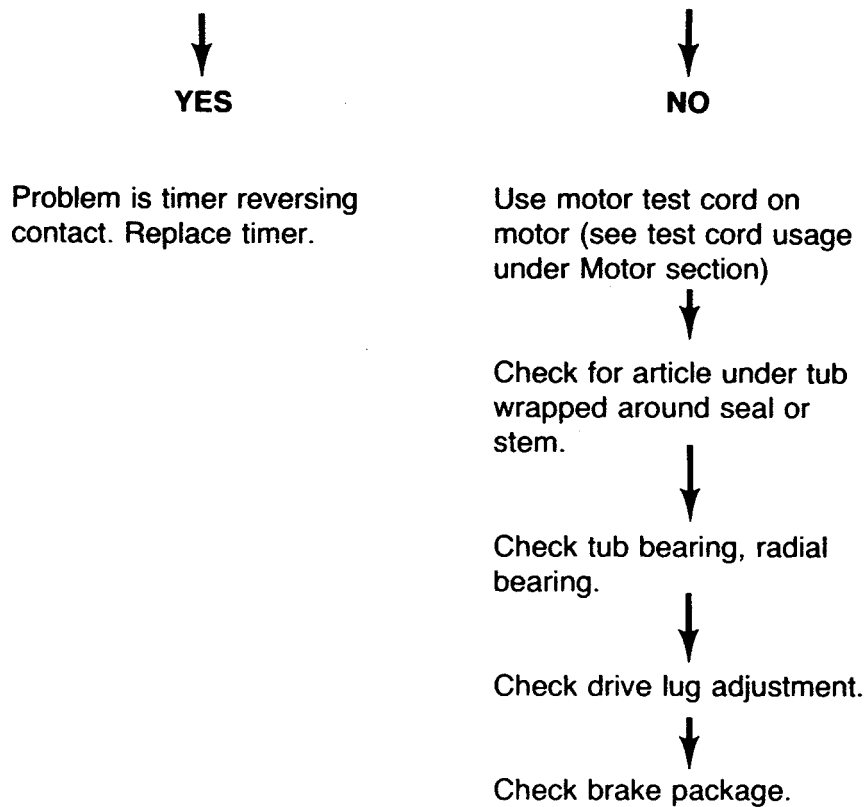
Timer motor. Check to be sure motor is running. If timer motor is not operating, replace timer motor.

**CAUTION: Always disconnect power supply before making any continuity checks.**

→ Timer motor runs but timer does not advance. Replace timer.

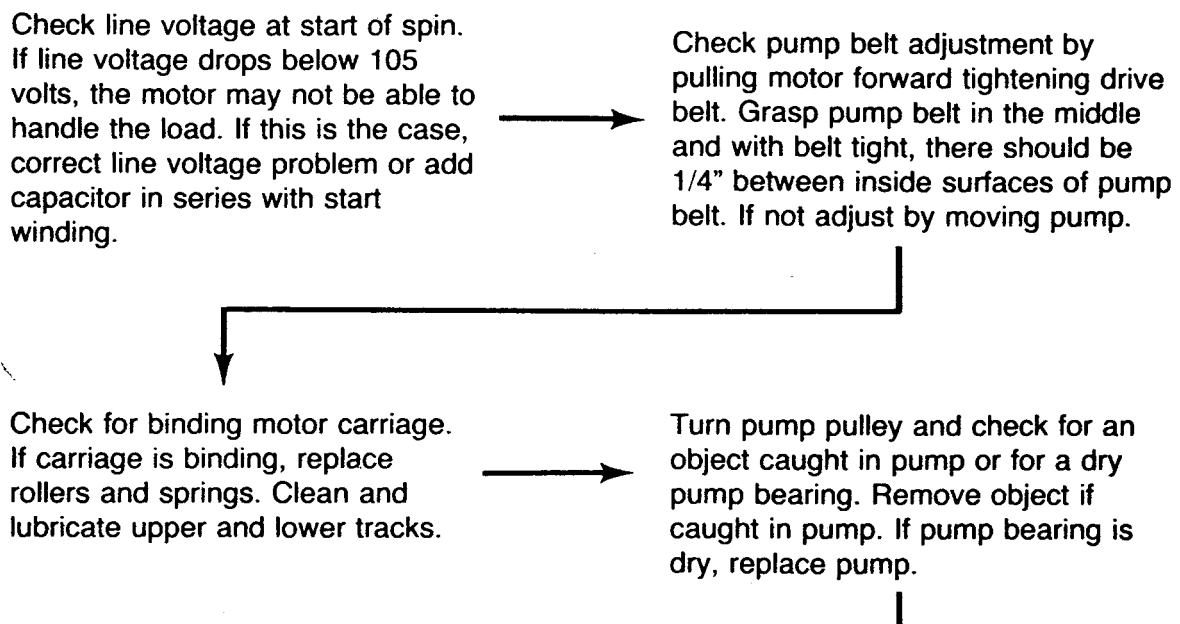
# WILL NOT SPIN

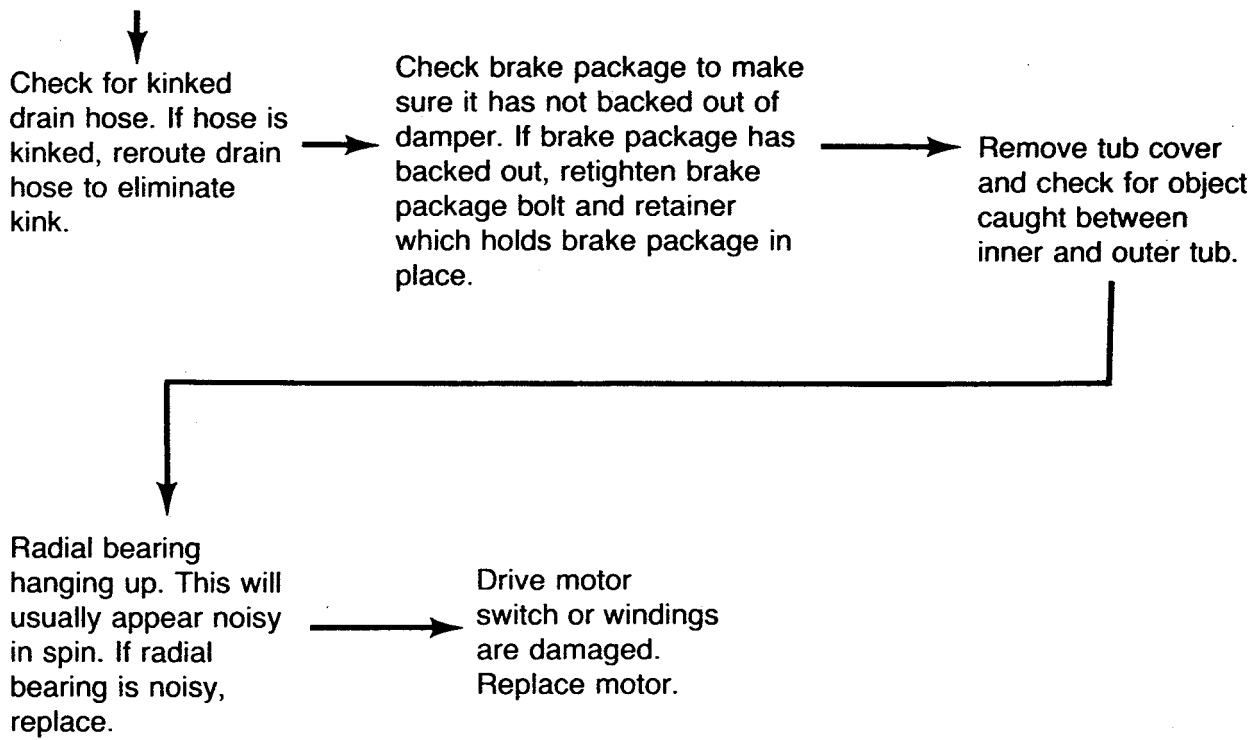




**CAUTION: Always disconnect power supply before making any continuity checks.**

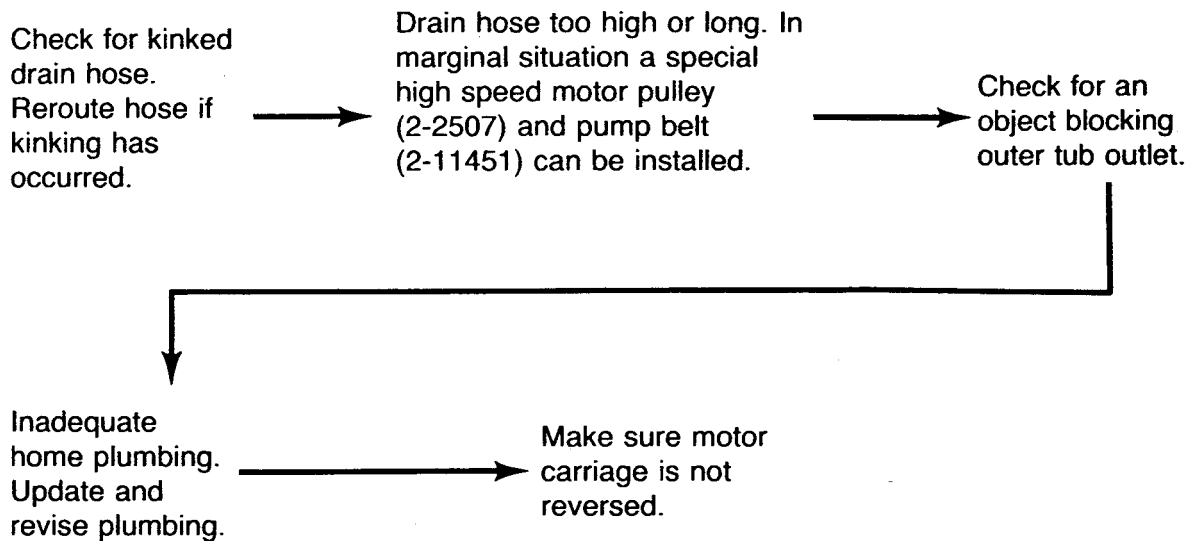
## Washer tries to spin - motor shuts off



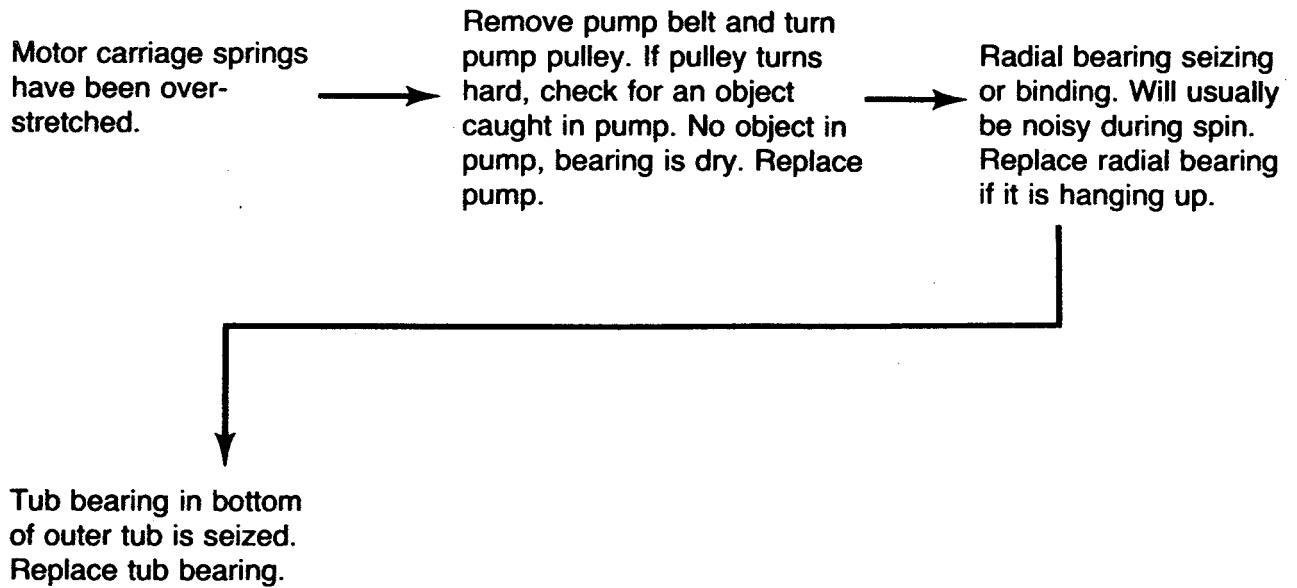


**CAUTION: Always disconnect power supply before making any continuity checks.**

## Slow pump out

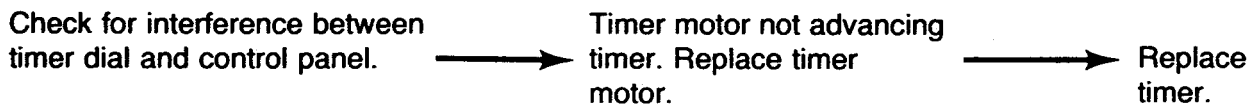


## Slow spin acceleration



**CAUTION:** Always disconnect power supply before making any continuity checks.

## Spin continuously — timer won't advance



## Washer continues to agitate and spin with lid raised "08" & "10" (Only)

Lid switch contacts are stuck in the closed position. Adjust or replace lid switch.

NOTE: Washer should not be operated under this condition.

**Washer continues to spin when the lid is raised — brake is not working.**

Check to make sure rotor bearing is not installed upside down. Match cone area of bearing with cone area of pulley.



Brake package not tight. Tighten brake package.

# MISCELLANEOUS PROBLEMS

**Washer spins out properly on damp dry but advances to next cycle — agitates dry**

***CAUTION: Always disconnect power supply before making any continuity checks.***

Water level switch sticking, with washer empty, there should not be continuity between terminals 7 and 16 on switch. If there is continuity, replace switch.



Timer is advancing past off. Replace timer.

**Washer noisy at beginning or during spin**

Belt squealing. Check for glazing. If belts are glazed, replace them. Also check pump belt adjustment and for a binding motor carriage. If belt needs to be adjusted, adjust by moving pump. If carriage is binding, clean and lubricate.



Ticking sound. Check to be sure motor pulley is not touching one of the motor carriage bolts or loose swedge on motor pulley.



Rumbling sound. Radial bearing may need to be replaced.

**Washer goes off balance too easily**

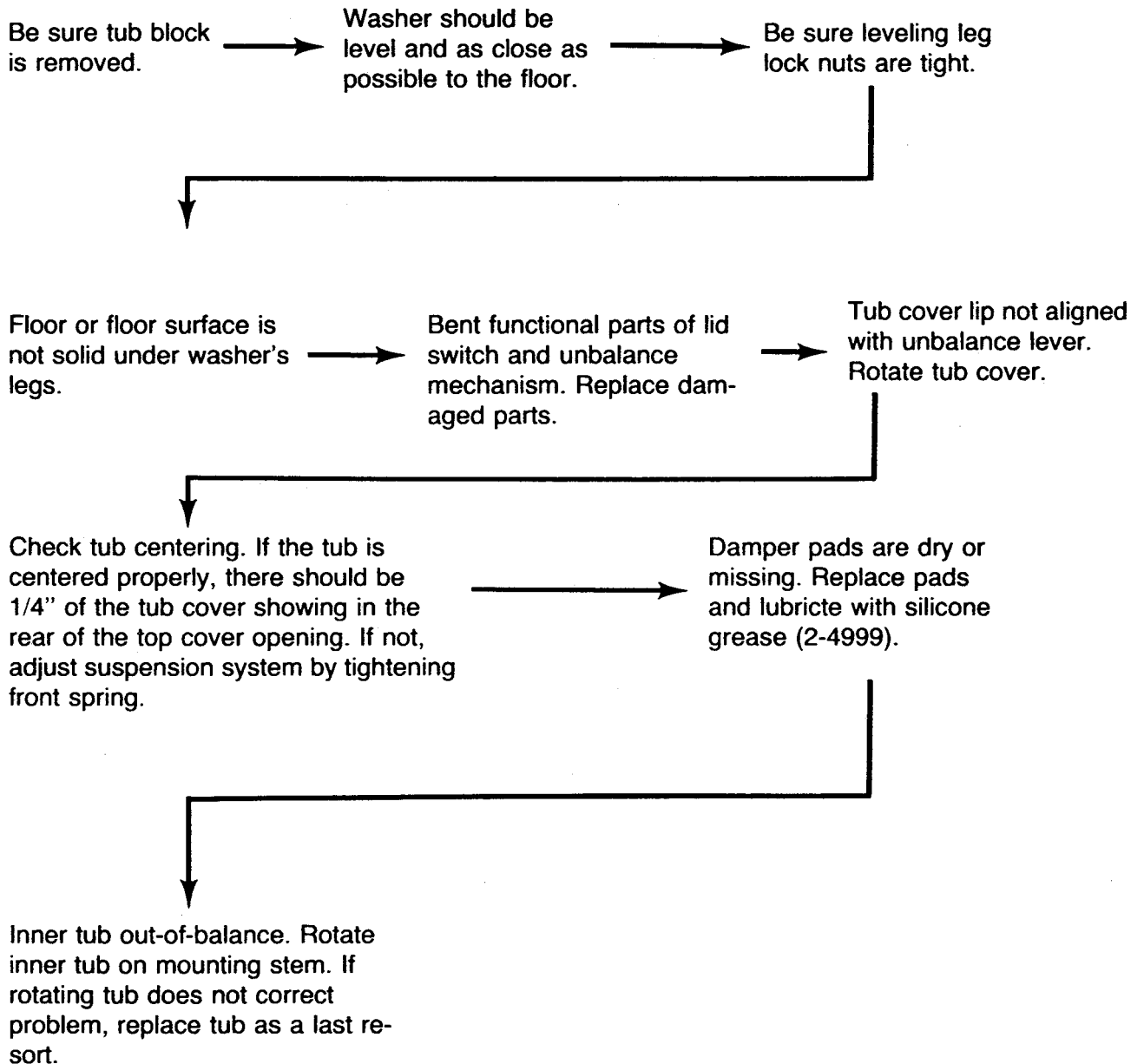
Check tub centering. If tub is centered properly, there should be 1/4" of the tub cover showing in the rear of the top cover opening. If over 1/4" adjust suspension system by tightening rear damper springs slightly.



Bent functional parts of lid switch and unbalance mechanism. Replace damaged components.

**CAUTION: Always disconnect power supply before making any continuity checks.**

## Vibrates and/or walks



# DIVERTER VALVE DIFFICULTIES

## SUDS SAVE AUTOMATIC WASHERS

### Washer won't save water

Make sure customer is using the regular wash cycle setting. Washer will not normally save water on the permanent press settings.

→ Check to be sure diverter valve flapper is sealing properly. If not install diverter valve flapper.

→ Check continuity between the two diverter valve solenoid terminals. No continuity, replace solenoid.

### Water won't return

Set timer for suds return and pull timer knob out. If washer won't agitate, see section on "Washer Will Not Agitate". If washer agitates, continue with following checks.

→ Check to be sure bottom of storage tank is above the diverter valve.

→ Be sure suds hose reaches the bottom of the storage tank.

↓  
Check to be sure pump belt is not off or broken. If belt is broken, replace belt and check pump for obstruction and adjust belt.

→ Pump locked. Turn pump pulley by hand. If unable to turn pulley, check for an obstruction in pump. No obstructions, replace pump.

**CAUTION:** Always disconnect power supply before making continuity checks.



## Section 3

# Service Procedures

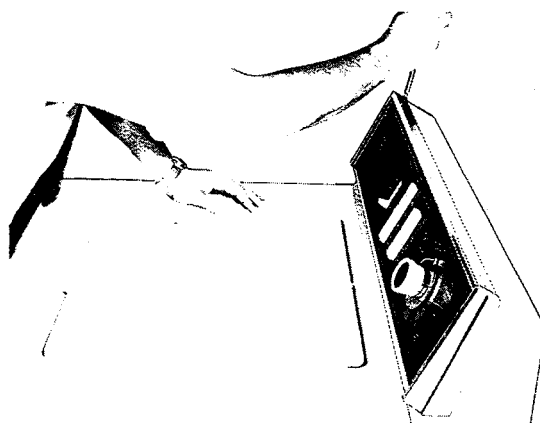
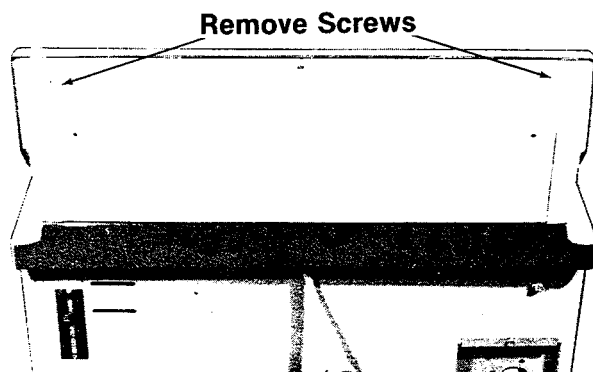
## CONTROL PANEL

### CONTROL PANEL ACCESS

**"08" ONLY**

Unplug washer.

Remove screws.



With the control panel cover open, you gain access to most of the electrical components.

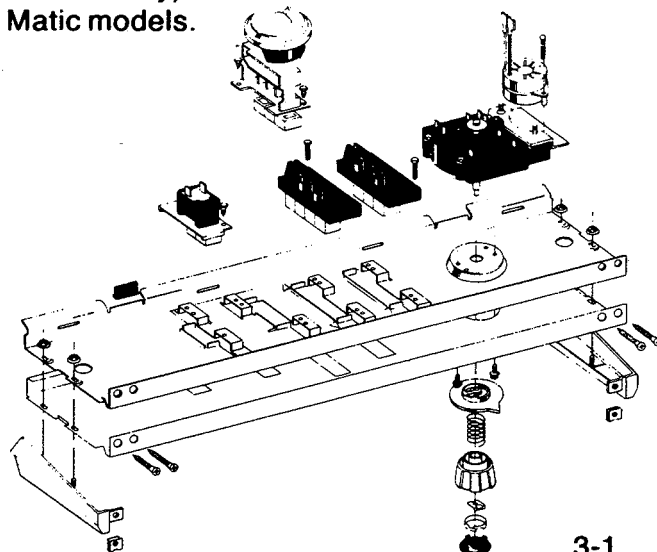
Timer, water temperature switch, water level switch, lid switch, speed switch (two-speed models only) and fabric switch on the Fabric-Matic models.

**"10" AND "12" MODELS**

Unplug washer.

### TO REMOVE CONTROL PANEL

Remove the two inside screws from top of panel and lay forward.



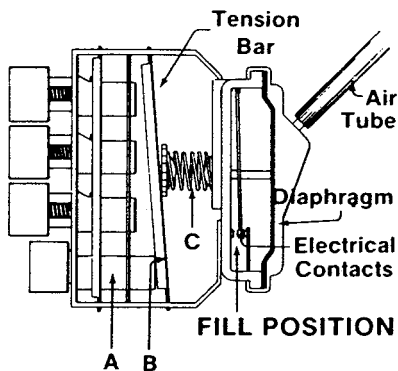


# WATER LEVEL CONTROL

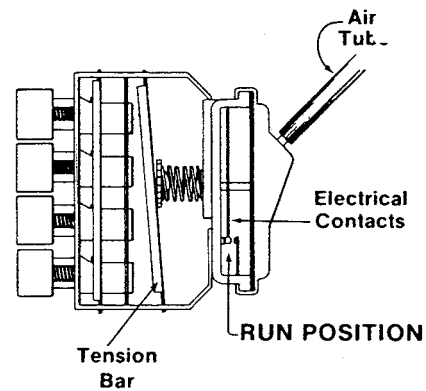
## PUSHBUTTON CONTROL

The deep tub models use a four-level pressure switch: Small, Medium, Large and Extra-Large. A three-level pressure switch is used for standard tub models. The settings are: Small, Medium and Large. The service procedures are the same for both.

The water level is controlled by varying the pressure exerted on the switch diaphragm when the desired control button is depressed. For example, assume that the Extra-Large control button is depressed for the "Fill" portion of the cycle. The control arm "A" will lock in position and press against the projection on bar (B), thus depressing the tension bar. As the tension bar is depressed, the spring (C) between the bar and switch is depressed, exerting pressure against the diaphragm in the switch, which will hold the electrical contact in the "Fill" position.



As water enters the washer and the level begins to rise, it flows into the air dome. This creates pressure on the diaphragm through the air tube. When the water reaches a predetermined level, the pressure is sufficient to overcome the pressure exerted on the diaphragm by the pressure switch. As the diaphragm rises, the electrical contact arm is moved from "Fill" to the "Run" position.



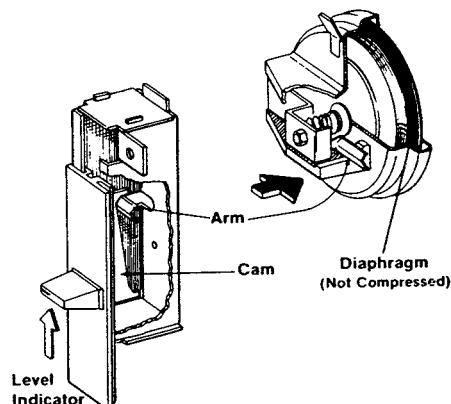
As water is drained from the washer during spin, water is also drained from the air dome, lowering air pressure in the air tube. This allows the switch contact to reset to the "Fill" position.

If the setting of MEDIUM or SMALL is used, there is less pressure applied to the tension bar, resulting in a decreased amount of air pressure required to trip the contact arms to the "Run" position.

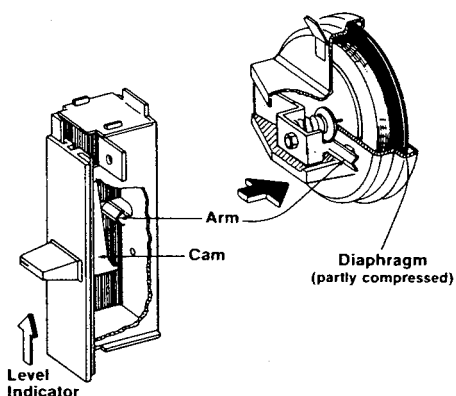
## VARIABLE CONTROL

Models having a variable water level control. The standard tub models may be set on Small, Medium, Large or any place between. The large tub models may be set on Small, Medium, Large, Extra-Large, or any place between.

When the level indicator is in the down position, there is no pressure on the diaphragm inside of the pressure switch.

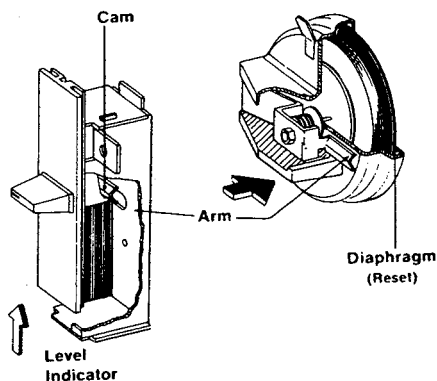


As the level indicator is raised, a tapered cam on the back side of the indicator comes in contact with an arm which pushes against the diaphragm. When the level indicator is pushed all the way up (to a point where resistance is encountered) the maximum pressure is applied to the diaphragm and it will take a full tub of water to overcome the pressure applied to the pressure switch, moving it from "Fill" to the "Run" position.



## RESET

This allows the user to change to a larger setting once the washer has stopped filling and started to agitate. The user pushes the level indicator all the way up until a resistance is encountered and then they continue to push the lever until it stops. This moves the contacts in the pressure switch from "Run" to "Fill" and the control can be reset to increase the desired water level.



# WATER LEVEL CONTROL SWITCH

Water level control must be in the "Full" position before the washer will agitate.

The following service procedures are recommended for the controls used on all models.

If the switch is functioning erratically, remove the air tube from the switch end and blow out the air tube. The washer should be emptied of any water. This will insure that the air tube is clear for proper switch operation. If this procedure is not followed, any water trapped in either the air dome or upper air tube can cause the switch to falsely actuate and start the washer agitating before the proper water level is reached. If water is found in either of these areas, check the hose for an air leak.

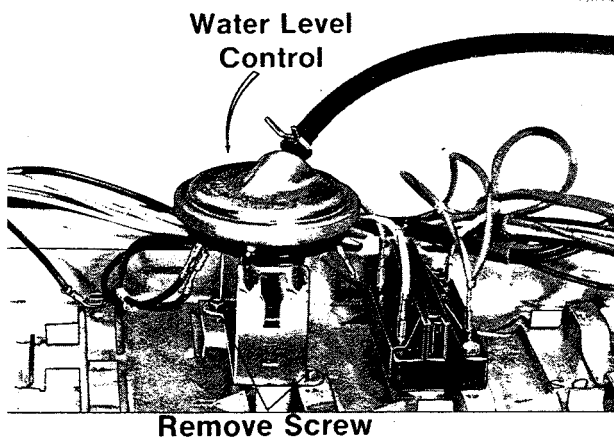
Water normally in the air dome will be drained when the washer is emptied. However, if any water is drawn into the air tube above the air dome, this water cannot be removed from the air tube by merely siphoning the washer.

Therefore, when a new switch is installed, blow out the air tube from the switch end.

All hose connections should be checked to be sure that they are airtight since air or water leaks will cause improper operation of the switch. No attempt should be made to adjust the water level control switch. The switch has been factory calibrated for proper balance of conditions which must be maintained to assure proper operation of the water level control. **Field adjustment is not recommended.**

The water level on the Extra-Large setting should register between the bottom of the second row of holes to slightly above the top row of holes in the tub. For settings of Large, Medium or Small, a proportionately lower

level of water will be used. With the proper water level setting on Extra-Large, the Large, Medium and Small settings should automatically be correct.



*If there are any questions on proper operation of the switch, the switch should be replaced.*

Due to the critical adjustment of the switch and the time required to adjust the water level switch, we do not recommend it be attempted.

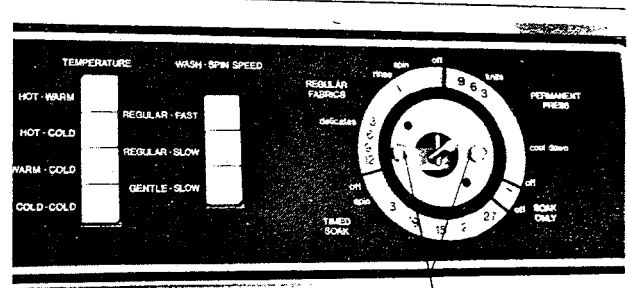
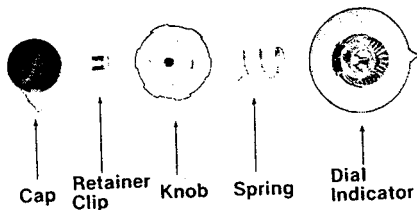
## TIMER

A timer is a series of switches driven by an electric motor. These switches control the fill, agitation and spin of a washer. These functions can be done at the same time, such as filling and spinning, like we do in our spray rinse.

## TIMER REMOVAL

Unplug washer.

Pry the cap off and pull the retainer clip off the timer shaft. Lift the timer knob and dial off.



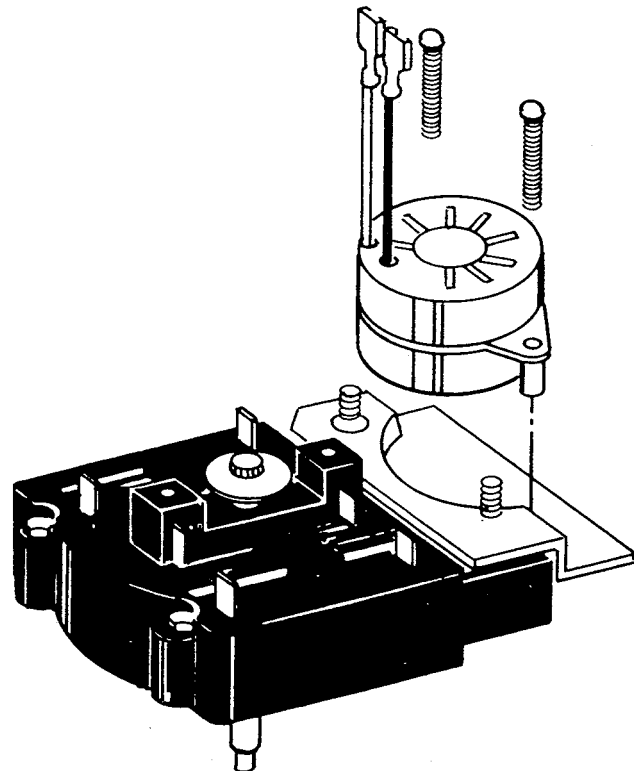
Timer Mounting Screws

**NOTE:** The timer shaft pin is longer on one side. This is to prevent the dial from being installed improperly.

Remove the two screws holding the timer in position. Note which set of holes the mounting screws are located in.

**NOTE:** Always replace by wire number.

If the timer will not advance, it usually requires replacing the timer motor. Check parts manual for part number.



Pull timer out and locate two screws holding the timer motor in position. Remove both screws and pull the timer motor free.

Position new motor, making sure the end of the motor gear is in the hole of the escapement cover. Reinstall the two screws to the timer motor.

Remove the motor leads from the timer and attach the new motor leads.

Mount timer into position and reinstall screws in same holes. Then reinstall dial and knob.

Replace the control panel cover and plug the washer in.

Turn to Damp Dry and run through the spin. The timer should advance.

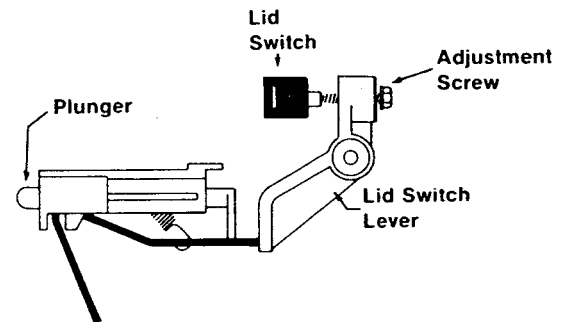
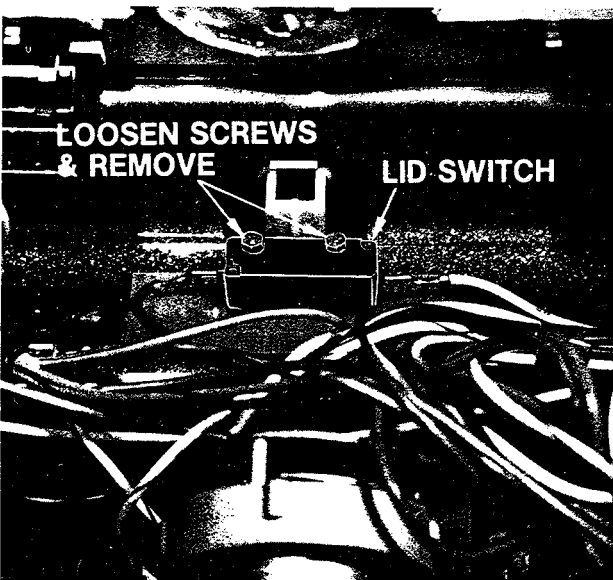
opened from 3/4" to 2". If adjustment is incorrect, close the lid, loosen screws and readjust the switch.

## LID SWITCH ADJUSTMENT - "10" AND "12"

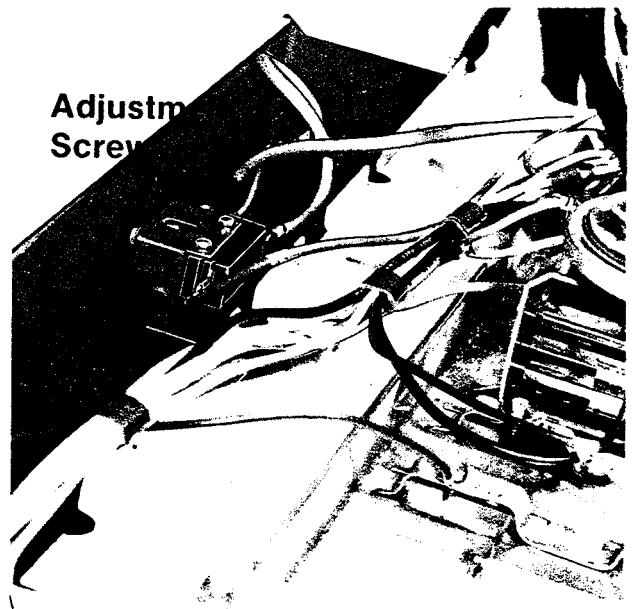
To adjust the lid switch:

Raise lid slowly until click is heard. Check opening in lid. When the click is heard, the lid should be opened from 3/4" to 2". If adjustment is incorrect, close the lid, and reset the adjustment screw.

## SWITCH ADJUSTMENT REMOVE CONTROL PANEL



## "10" AND "12" LID SWITCH

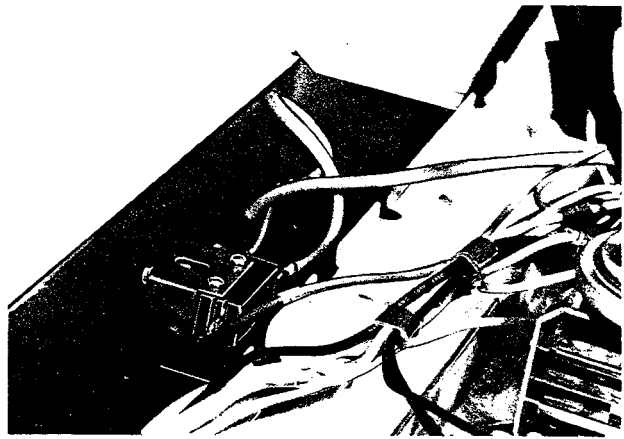


## LID SWITCH ADJUSTMENT - "08" ONLY

When lid switch is replaced, be sure plastic barrier is replaced. After the switch has been replaced, do not tighten screws. Be sure the lid is closed. Slide the switch forward until a "click" is heard. Hold switch firmly in this position and tighten the screws. Do not allow switch to move. Raise lid slowly until another click is heard. Check opening in lid. When the second click is heard, the lid should be

Remove wires from switch.

Remove two screws holding switch and switch bracket. **NOTE:** When replacing switch, always replace plastic shield on bottom of switch.



## FRONT ACCESS

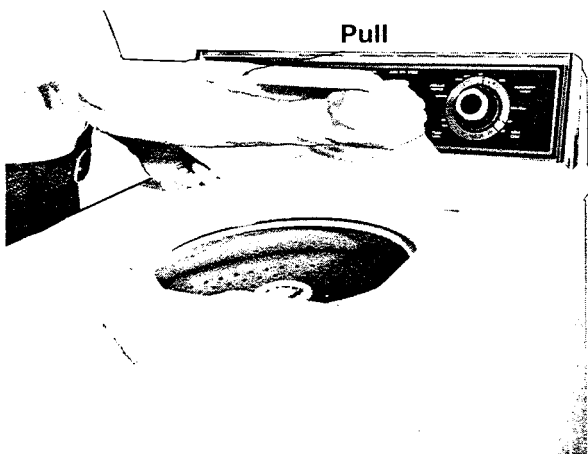
### LID REPLACEMENT

#### TO REMOVE LID

To remove the lid, follow these steps:

Raise the lid where it is at a 45° angle with the top cover.

With the left hand, grasp the left side of the lid toward the back. With the right hand, grasp the right side of the lid at the right front corner.

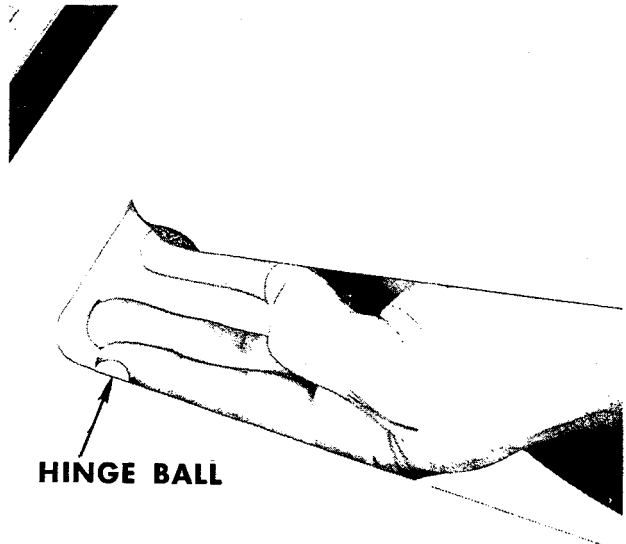


**Taking care to watch where the ball hinges go,** pull toward you with the right hand.

#### TO REPLACE LID

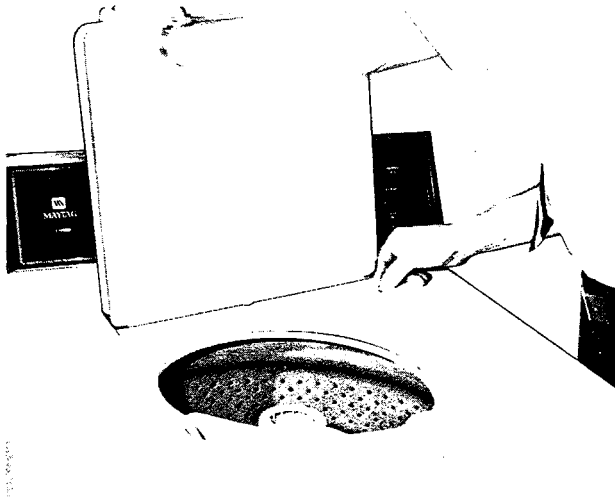
To replace the lid, follow these steps:

Place a hinge ball in the recess of the left side of the top cover. Holding it in position, place the lid over the ball so the ball is in the recess on the left side of the lid.

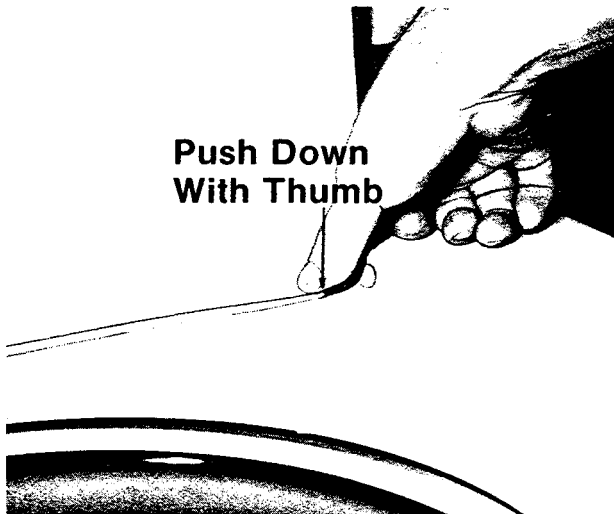


Hold the lid with the left hand as shown in the next photo keeping sufficient pressure against the left side to insure the hinge ball will remain wedged between the lid and the top cover.

With the right hand, place a hinge ball in the right side of the top cover recess.



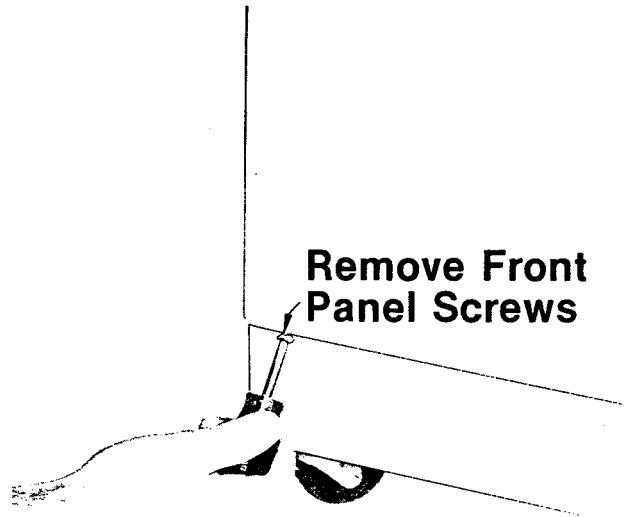
Push the lid down against the hinge ball on the right side and with the right thumb, press down sharply to engage the lid with the hinge ball on the right side.



**NOTE:** If the fit between the right hinge ball and the lid is so tight you cannot press it into position with the right thumb, carefully strike the right corner of the lid with the palm of the hand to snap it into position.

## FRONT PANEL REMOVAL

Remove the two screws, one on each corner. Pull out on the bottom of the front panel until the two clips come loose at the top.



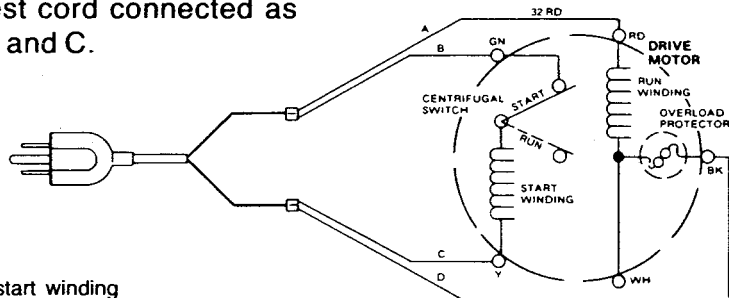
With the front panel off, you have access to the motor, pump, top cover and internal hoses. The Suds-Save (diverter) valve is also accessible.

# MOTOR

## USING THE 38183 MOTOR TEST CORD FOR MOTOR TESTING

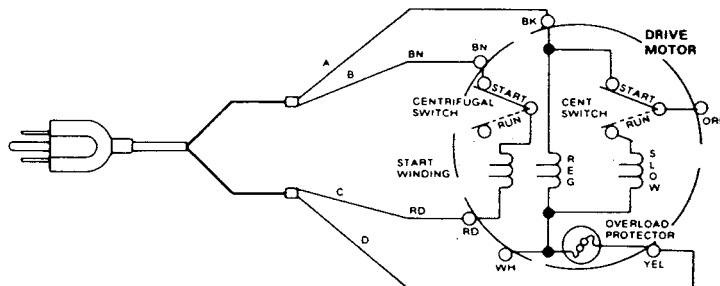
### HOOKING UP THE MOTOR TEST CORD

**NOTE:** If the washer spins instead of agitates with the motor test cord connected as shown, reverse wires B and C.

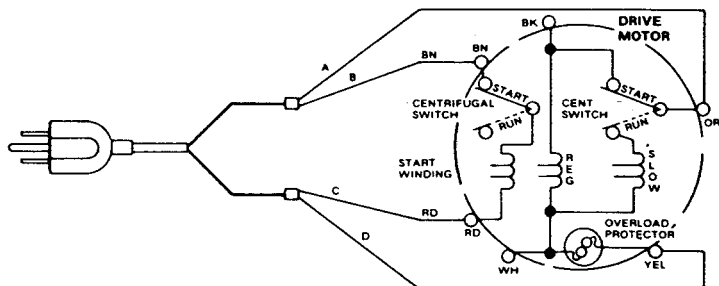


**NOTE:** On "12" line models, start winding colors are blue and yellow.

### TEST CORD CONNECTION TO CHECK 2-1805 (SINGLE SPEED) MOTOR FOR AGITATION



### TEST CORD CONNECTION TO CHECK 2-1807 (TWO SPEED) MOTOR FOR AGITATION – REGULAR SPEED

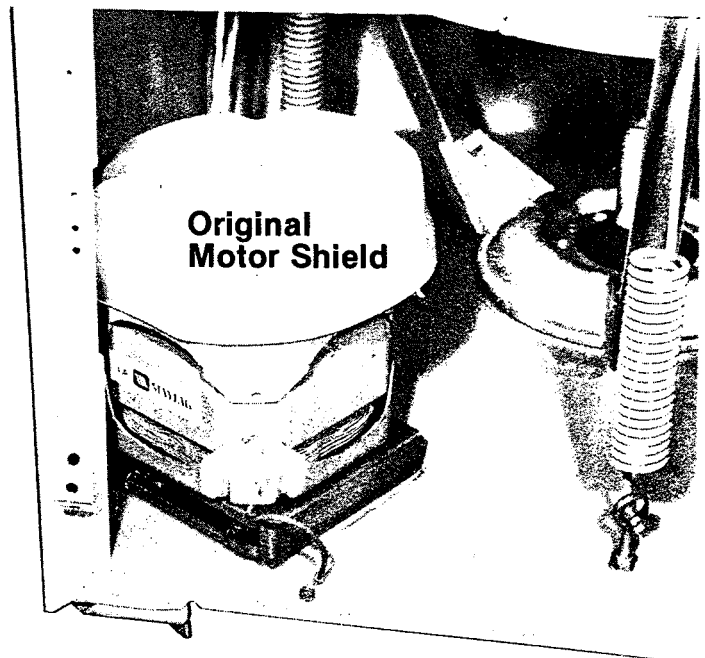
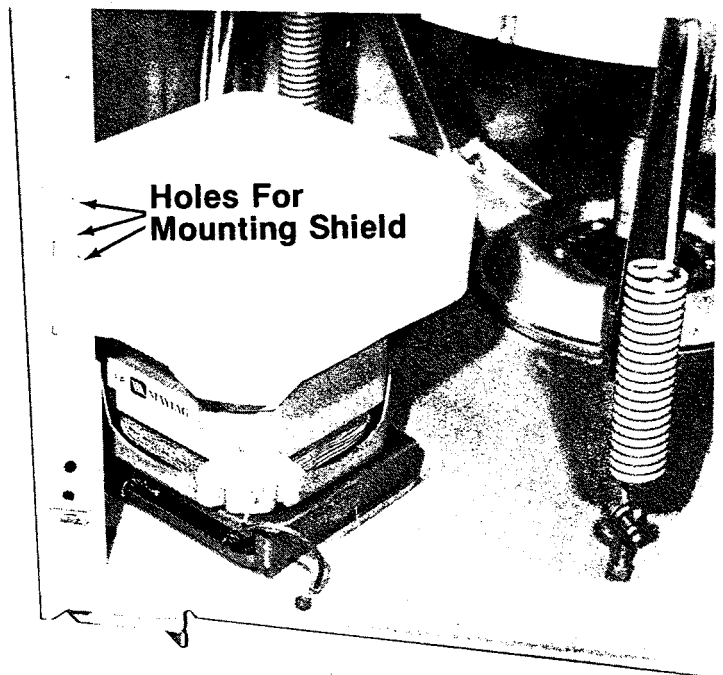


### TEST CORD CONNECTION TO CHECK 2-1807 (TWO SPEED) MOTOR FOR AGITATION – SLOW SPEED

## MOTOR SHIELD

Three holes in the cabinet flange allow positioning of the shield to insure that it will not interfere with the motor sliding in the carriage. Once installed, move the motor in the carriage, to insure that the end bell does not hit the cover. When installing a new motor, the shield may need to be moved from the original mounting position.

The motors are interchangeable with either style shield. However, the new shield 2-15098 is secured to the cabinet with a 2-13121 screw and is not interchangeable with the old style.

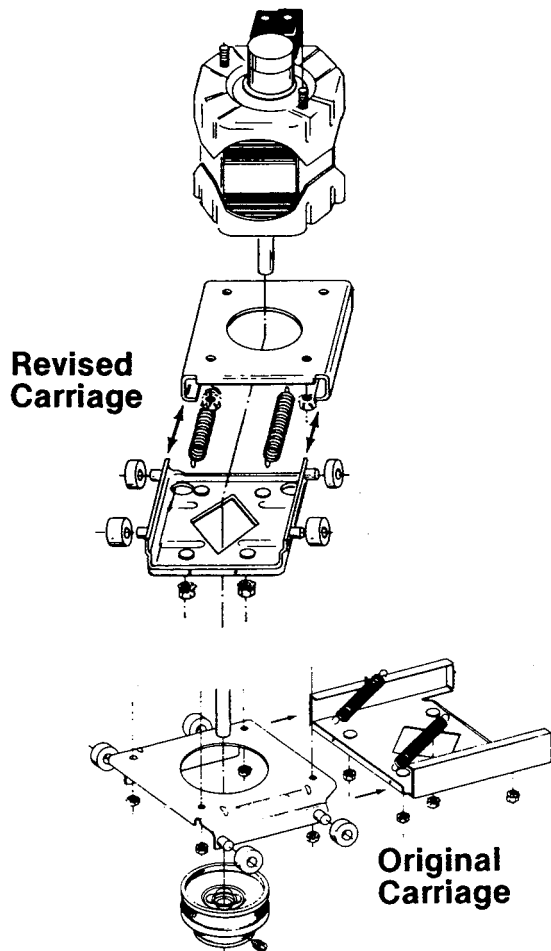




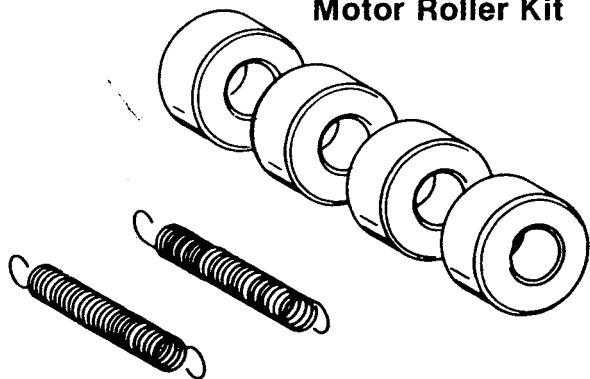
## MOTOR AND CARRIAGE

The revised motor carriage is used on "10" and "12" model washers. This new carriage essentially reverses the upper and lower mounts. The motor rollers on the revised carriage will ride in the top of the motor mount rather than in the lower portion. Removal of the revised motor carriage is the same as the original.

A 2-5999 kit is available to install this new motor mount on older washers.



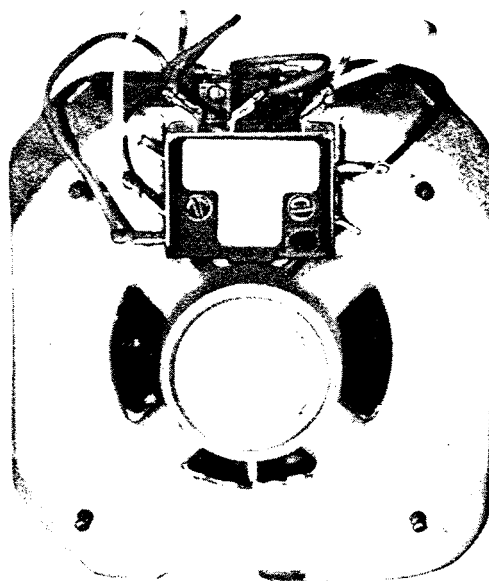
**Motor Roller Kit**



## MOTOR REPLACEMENT

The drive motor is attached to the upper section of the motor base by the motor studs and nuts. Motor replacement necessitates removing the motor base from the washer base.

1. Remove front panel.
2. Remove wires from motor.
3. Tilt washer and remove drive belt and pulley from motor shaft.
4. Remove nuts holding motor base to base frame and remove motor base and motor.
5. Disengage tension springs and remove mounting nuts. (To remove two of the nuts, align upper and lower sections and insert wrench through the slots into lower section.)



To remove motor from bracket, stand motor (shaft up) and lift off. With motor removed, carriage and rollers are accessible for service.

Clean the motor base of any dirt or lint. Replace motor on motor base and to base frame. Lubricate the track and glides with Maytag 2-3959 poly grease. When motor base is attached to base frame, mount with slotted end of lower carriage to the back.

After the motor has been replaced, it will not be necessary to check or make a drive belt adjustment as the correct tension is automatically applied by the two motor tension springs. It will however be necessary to check the pump belt for proper adjustment.

When replacing motor pulley, position so that end at motor shaft is about 1/32" less than flush with bottom of pulley.

## MOTOR GROUND WIRE

A 7" green ground wire is attached to the right-hand rear of the motor carriage to the washer base. This ground wire provides additional protection to the service technician. To maintain all grounding provisions provided with the appliance, the ground wire must be reinstalled any time removal of the wire is required.

## LOW VOLTAGE

Refer to electrical test meter.

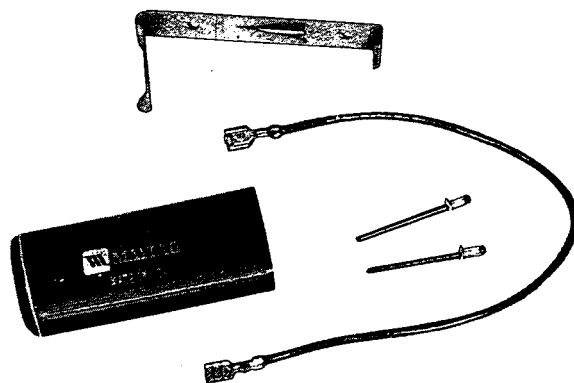
In some installations with low voltage, the washer motor will hum and fail to start spinning. If a motor remains too long in the start winding, it will overheat and trip on the overload protector. With a start capacitor added in series with the start winding, the motor will develop additional starting torque helping it out of the start winding faster.

Keep in mind that the main problem is low voltage which should be corrected. A start capacitor is helpful for voltage ranges below 110 volts. Below 105 volts, installing a start capacitor may or may not help.

A start capacitor adds extra starting torque helping the motor get out of the start winding faster. By giving the motor this additional torque, it will not overheat and open the motor overload protector.

## 2-6103 CAPACITOR KIT

To make installation of a capacitor easier, we have available a 2-6103 capacitor kit. This kit consists of the following items and instructions.



### 2-6103 CAPACITOR KIT

1	2-11149	Clip for capacitor
1	2-832	Capacitor
1	2-3237	Green No. 17 wire
2	2-10720	Pop rivet



# MOTOR SWITCH

## 2-1666-8 MAYTAG MOTOR

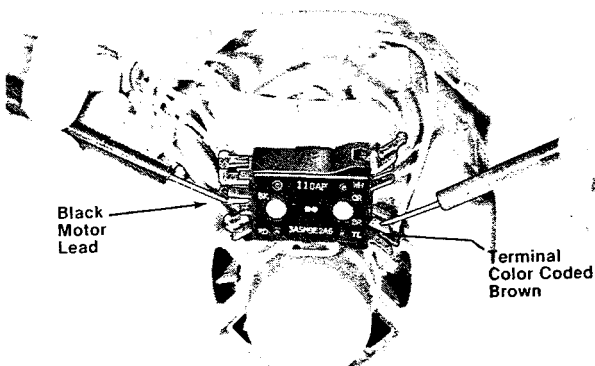
**NOTE:** These instructions and switch should be used only for the above motor number. It is possible the above motor may not look the same as the motors shown in these instructions, but the wiring connections are the same.

### CHECKING ORIGINAL SWITCH

Disconnect appliance from power source before beginning service. This switch should be checked in the start and run positions.

#### SWITCH IN START POSITION

1. Disconnect the brown wire harness lead from the motor switch and attach one ohmmeter lead to this switch terminal. Attach the other ohmmeter lead to the terminal on which the black motor lead wire is attached.

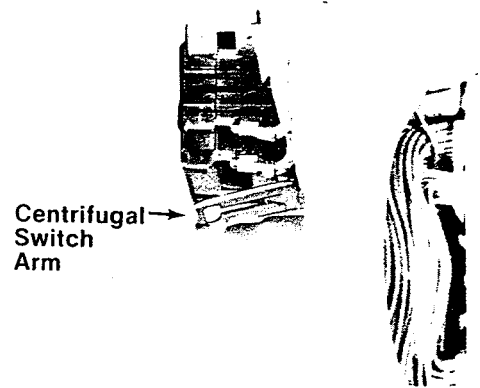


2. With the meter set at RX1, you should have "0" ohms resistance. If not, replace the motor switch.

#### SWITCH IN RUN POSITION

1. Disconnect the brown wire harness lead from the motor switch and attach one ohmmeter lead to this switch terminal. Attach the other lead to the terminal on which the black motor lead wire is attached.

2. Locate the centrifugal switch arm (between switch and shaft) and push arm toward shaft.



3. With the meter set at RX1, you should read an open circuit (no continuity). If not, replace the motor switch.

### SPEED SWITCH

**To check 4-pole or normal speed winding switch:**

1. Remove the wire harness leads from the orange and black terminals.
2. Attach ohmmeter leads to the orange and black terminals. Meter should read "0" ohms resistance.

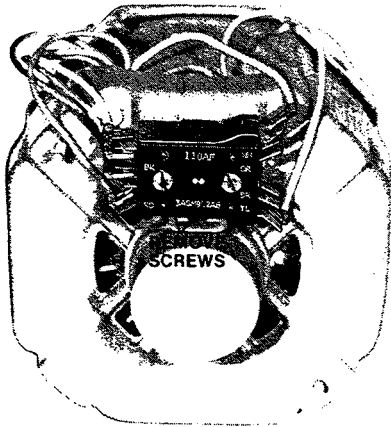
**To check 6-pole or slow speed switch:**

1. Remove white motor wire from switch.
2. Remove orange wire harness lead from switch.
3. Attach ohmmeter leads to orange terminal and attach to the terminal from which the white motor wire was removed.
4. Ohmmeter should now read open.
5. With switch fully depressed, meter should read "0" ohms resistance.

### SWITCH REPLACEMENT

1. Remove the washer's wire harness leads from the switch terminals.

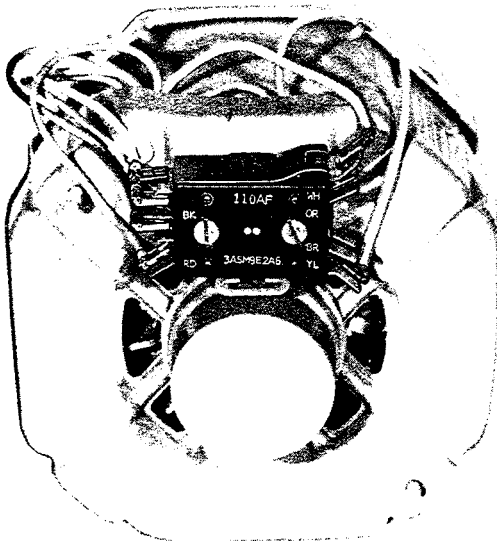
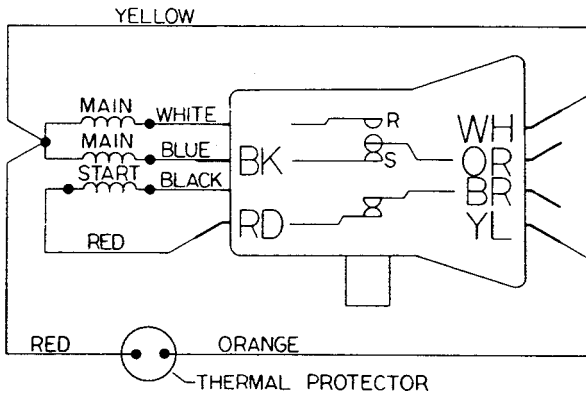
2. Remove the two switch mounting screws and save them to mount the new switch.



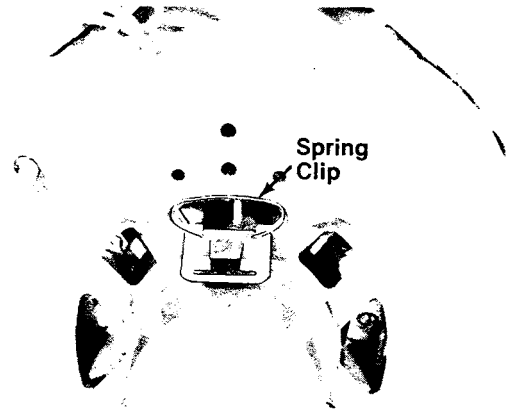
3. Remove the motor leads from the switch.

## INSTALLATION OF SWITCH

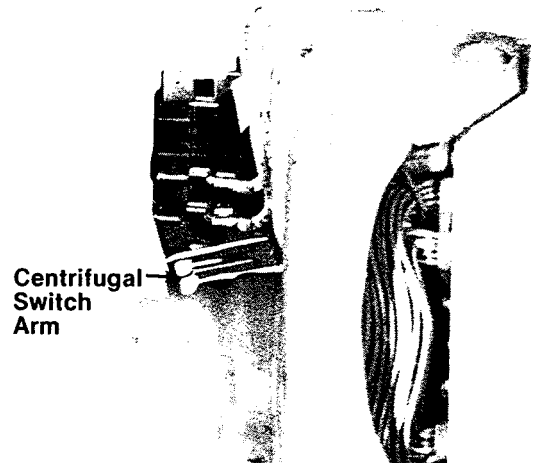
1. Connect the motor leads to the new switch before mounting the switch to the motor. Shown in the following drawing and photo is the correct positioning of the motor leads to the motor switch.



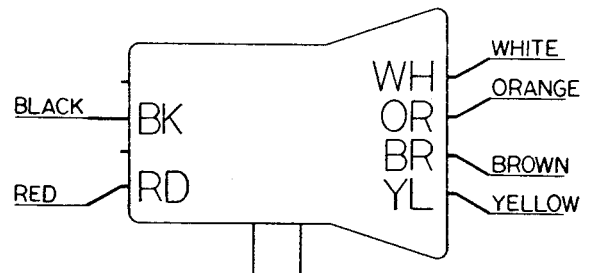
2. The centrifugal switch arm should remain seated evenly in the motor end shield notches and the spring clip should remain fixed in place in the notch provided in the end shield. If not, reposition them before attaching the motor switch.



3. Attach the new switch on the motor end shield with the two mounting screws removed previously.
4. With the motor in the start position (motor not running), check to be sure the centrifugal switch arm is in the position shown below.



5. Match colors of appliance wire harness to colors on switch terminals as shown below and reattach wire harness.



## 2-1664-8 MAYTAG MOTOR

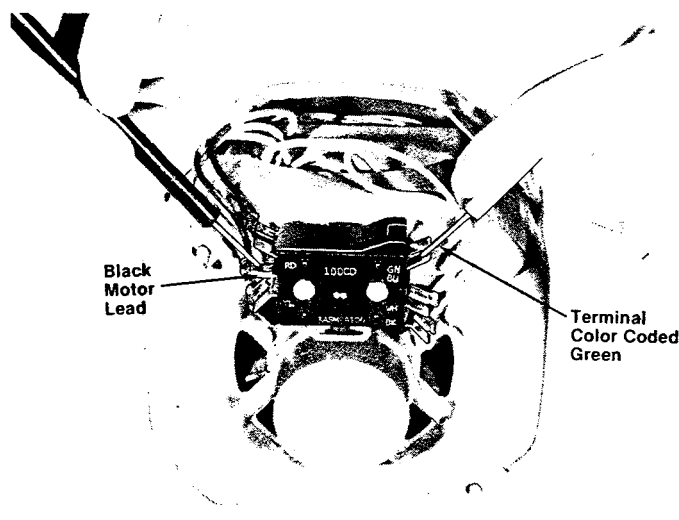
**NOTE:** These instructions and switch should be used only for the above motor number. It is possible the above motor may not look the same as the motors shown in these instructions, but the wiring connections are the same.

### CHECKING ORIGINAL SWITCH

Disconnect appliance from power source before beginning service. This switch should be checked in the start and run positions.

### SWITCH IN START POSITION

1. Disconnect the green wire harness lead from the motor switch and attach one ohmmeter lead to this switch terminal. Attach the other ohmmeter lead to the terminal on which the black motor lead wire is attached.



2. With the meter set at RX1, you should have "0" ohms resistance. If not, replace the motor switch.

### SWITCH IN RUN POSITION

1. Disconnect the green wire harness lead from the motor switch and attach one ohmmeter lead to this switch terminal. Attach the other lead to the terminal on which the black motor lead wire is attached.

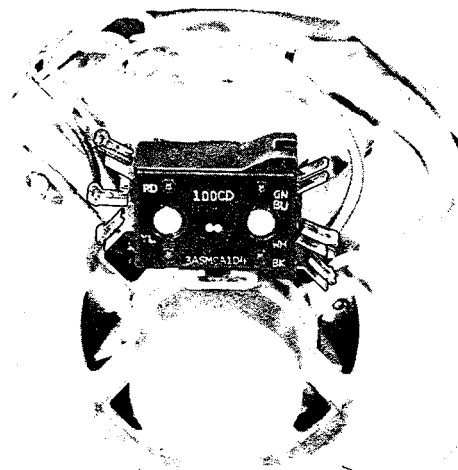
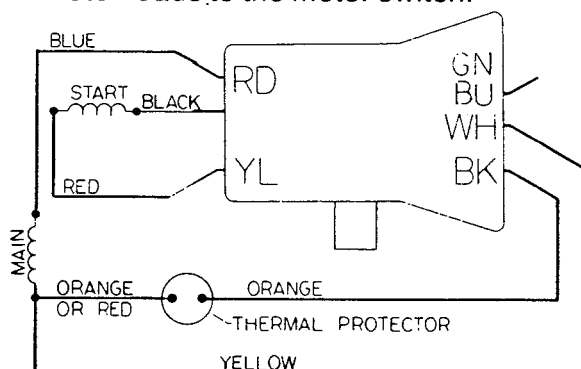
2. Locate the centrifugal switch arm (between switch and shaft) and push arm toward shaft.
3. With the meter set at RX1, you should read an open circuit (no continuity). If not, replace the motor switch.

### SWITCH REPLACEMENT

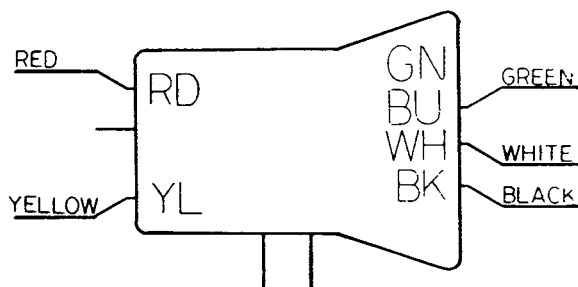
1. Remove wire harness leads from the switch terminals.
2. Remove the two switch mounting screws holding the motor switch to the motor and save them to mount the new switch.
3. Remove the motor leads from the switch.

### INSTALLATION OF SWITCH

1. Connect the motor leads to the new switch before mounting the switch to the motor. Shown in the following drawing and photo is the correct positioning of the motor leads to the motor switch.



2. The centrifugal switch arm should remain seated evenly in the motor end shield notches and the spring clip should remain fixed in place in the notch provided in the end shield. If not, reposition them before attaching the motor switch.
3. Attach the new switch on the motor end shield with the two mounting screws removed previously.
4. With the motor in the start position (motor not running), check to be sure the centrifugal switch arm is in the position shown on Page 3-13.
5. Match colors of appliance wire harness to colors on switch terminals and reattach wire harness.



## 2-1666-4, 2-1666-9 & 2-1666-10

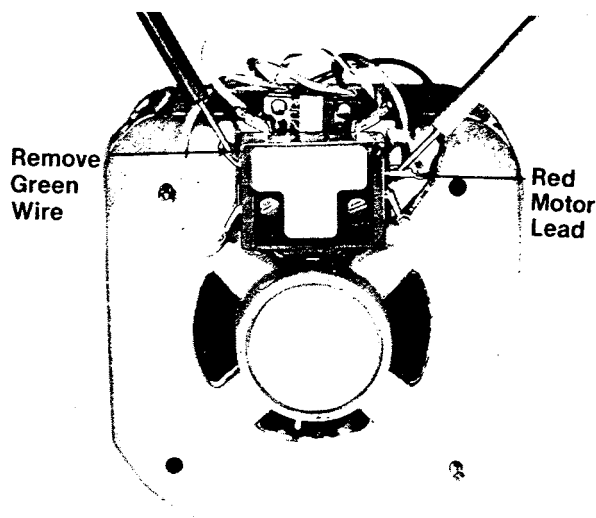
**NOTE:** These instructions and switch should be used only for the above motor numbers. It is possible the above motors may not look the same as the motors shown in these instructions, but the wiring connections are the same.

## CHECKING ORIGINAL SWITCH

Disconnect appliance from power source before beginning service. This switch should be checked in the start and run positions.

## SWITCH IN START POSITION

1. Disconnect the green wire harness lead from the motor switch and attach one ohmmeter lead to this switch terminal. Attach the other ohmmeter lead to the terminal on which the black motor lead wire is attached.



2. With the meter set at RX1, you should have "0" ohms resistance. If not, replace the motor switch.

## SWITCH IN RUN POSITION

1. Disconnect the green wire harness lead from the motor switch and attach one ohmmeter lead to this switch terminal. Attach the other lead to the terminal on which the black motor lead wire is attached.
2. Locate the centrifugal switch arm (between switch and shaft) and push arm toward shaft.
3. With the meter set at RX1, you should read an open circuit (no continuity). If not, replace the motor switch.

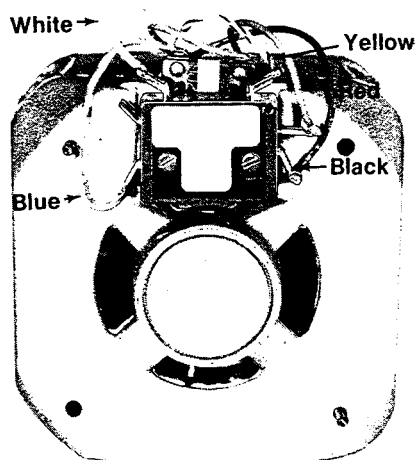
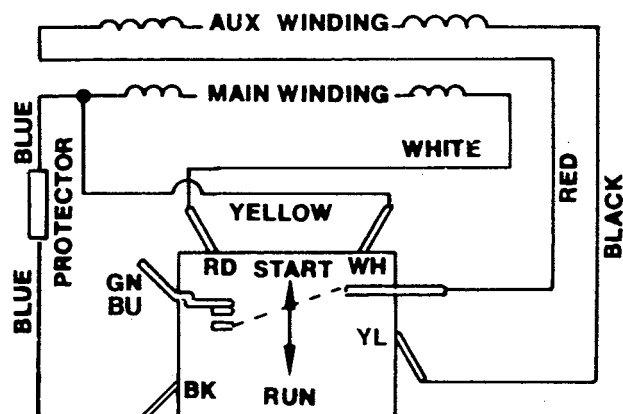
## SWITCH REPLACEMENT

1. Remove wire harness leads from the switch terminals.
2. Remove the two switch mounting screws holding the motor switch to the motor and save them to mount the new switch.
3. Remove the motor leads from the switch.

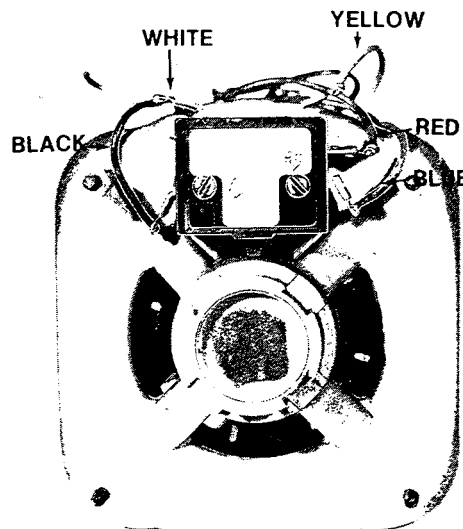
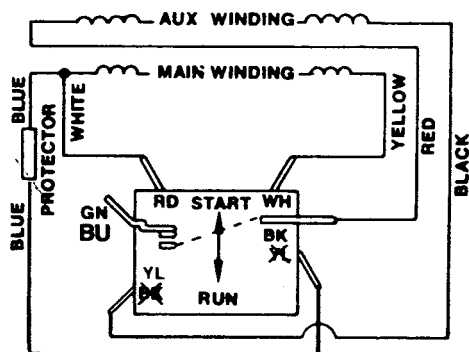
## INSTALLATION OF SWITCH

1. Connect the motor leads to the new switch before mounting the switch to the motor.

Shown in the following drawing and photo is the correct positioning of the motor leads to the motor switch.



**NOTE:** On early 2-1664 motors, the black motor wire may be difficult to connect due to a shorter length wire. If this should occur, change the label on the motor switch as show in the following drawing and photo. When attaching washer's wire harness to drive motor, make sure the wiring is hooked up per corrected motor switch labeling.



2. The centrifugal switch arm should remain seated evenly in the motor end shield notches and the spring clip should remain fixed in place in the notch provided in the end shield. If not, reposition them before attaching the motor switch.
3. Attach the new switch on the motor end shield with the two mounting screws removed previously.
4. With the motor in the start position (motor not running), check to be sure the centrifugal switch arm is in the position shown on Page 3-13.
5. Match colors of appliance wire harness to colors on switch terminals and reattach wire harness.

## 2-1666-2, 2-1666-11 AND 2-1666-12

**NOTE:** These instructions and switch should be used only for the above motor numbers. It is possible the above motors may not look the same as the motors shown in these instructions, but the wiring connections are the same.

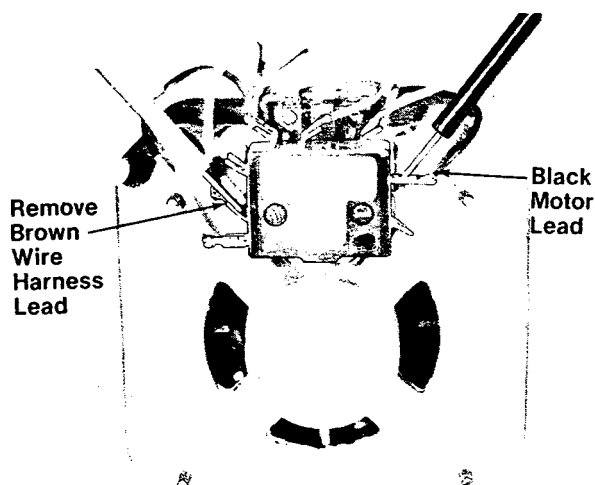
## CHECKING ORIGINAL SWITCH

Disconnect appliance from power source before beginning service. This switch should be checked in the start and run positions.

## SWITCH IN START POSITION

1. Disconnect the brown wire harness lead from the motor switch and attach one

ohmmeter lead to this switch terminal. Attach the other ohmmeter lead to the terminal on which the black motor lead wire is attached.



2. With the meter set at RX1, you should have "0" ohms resistance. If not, replace the motor switch.

## SWITCH IN RUN POSITION

1. Disconnect the brown wire harness lead from the motor switch and attach one ohmmeter lead to this switch terminal. Attach the other lead to the terminal on which the black motor lead wire is attached.
2. Locate the centrifugal switch arm (between switch and shaft) and push arm toward shaft.
3. With the meter set at RX1, you should read an open circuit (no continuity). If not, replace the motor switch.

## SPEED SWITCH

**To check 4-pole or normal speed winding switch:**

1. Remove the wire harness leads from the orange and black terminals.
2. Attach ohmmeter leads to the orange and black terminals. Meter should read "0" ohms resistance.

## To check 6-pole or slow speed switch:

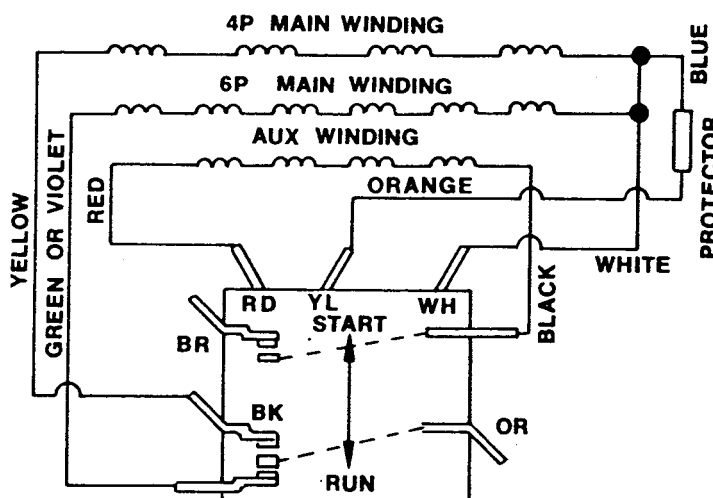
1. Remove white motor wire from switch.
2. Remove orange wire harness lead from switch.
3. Attach ohmmeter leads to orange terminal and to the terminal from which the white motor wire was removed.
4. Ohmmeter should now read open.
5. With switch fully depressed, meter should read "0" ohms resistance.

## SWITCH REPLACEMENT

1. Remove the washer's wire harness leads from the switch terminals.
2. Remove the two switch mounting screws and save them to mount the new switch.
3. Remove the motor leads from the switch.

## INSTALLATION OF SWITCH

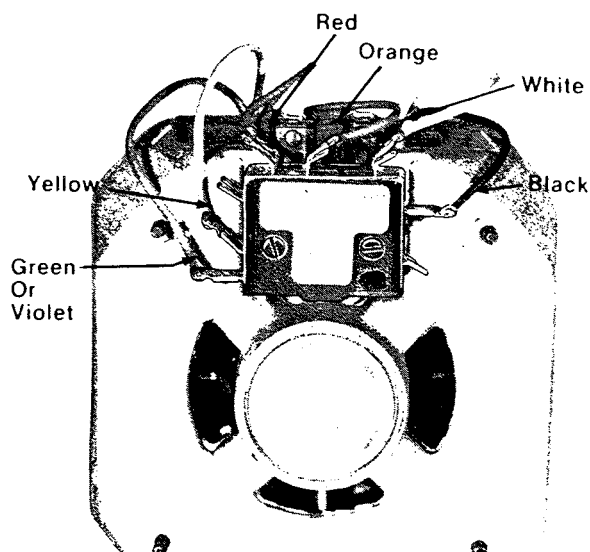
1. Connect the motor leads to the new switch before mounting the switch to the motor. Shown in the following drawing and photo is the correct positioning of the motor leads to the motor switch.



See following page for photo.

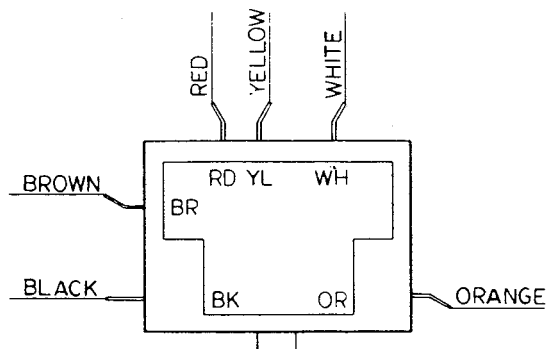


See previous page for diagram.



2. The centrifugal switch arm should remain seated evenly in the motor end shield notches and the spring clip should remain fixed in place in the notch provided in the end shield. If not, reposition them before attaching the motor switch.

3. Attach the new switch on the motor end shield with the two mounting screws removed previously.
4. With the motor in the start position (motor not running), check to be sure the centrifugal switch arm is in the position shown on Page 3-13.
5. Match colors of appliance wire harness to colors on switch terminals as shown below and reattach wire harness.



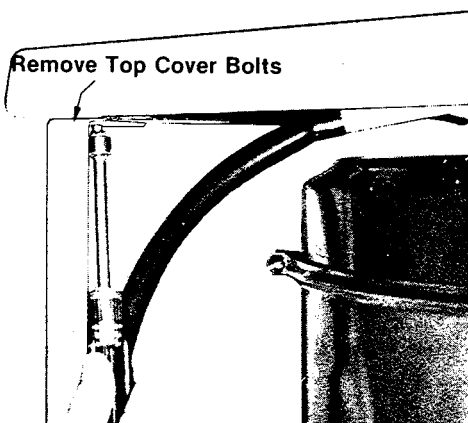
## TOP ACCESS

### TOP COVER

Remove front panel.

Remove two top cover bolts then tilt the top cover back.

On models with bleach hose, remove hose from the top.



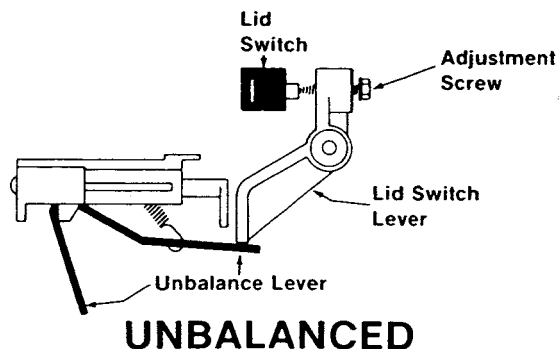
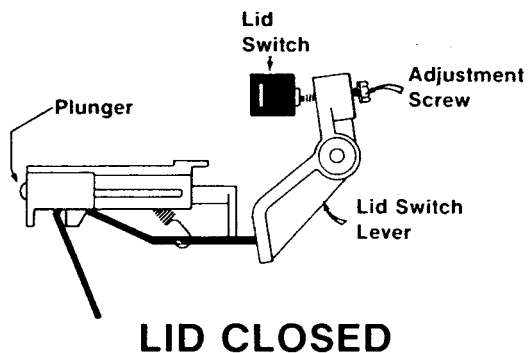
### TOP COVER RAISED

Lid switch operating and out-of-balance mechanism.



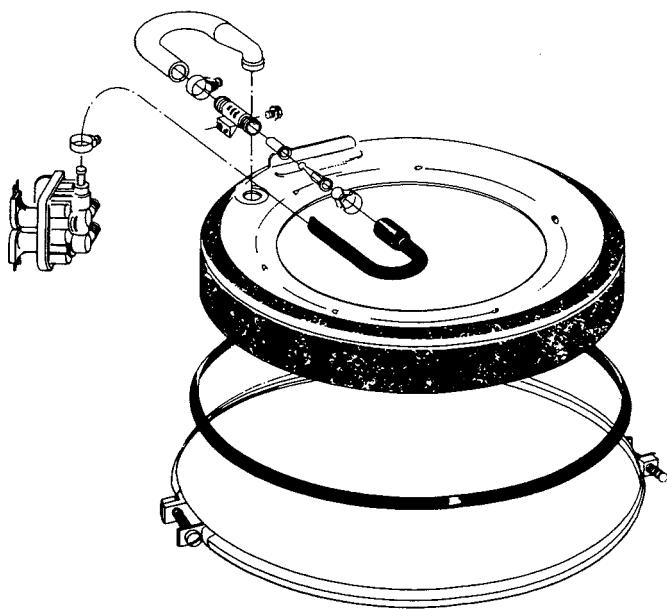
A lever on lid switch operating mechanism is positioned just in front of tub cover bracket when top is down in normal position. In the event of an out-of-balance condition, the oscillating tub would bring this bracket into con-

tact with the lever. This will cause the lever to pivot and release the lid switch operating button on models prior to the "10" models or release the lid switch lever on the "10" and "12" model washers.

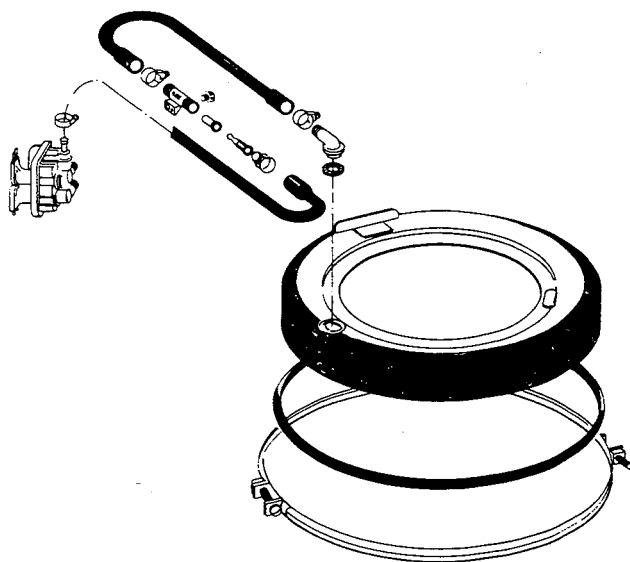


See lid switch section for adjustment.

## "08" AND "10" MODELS



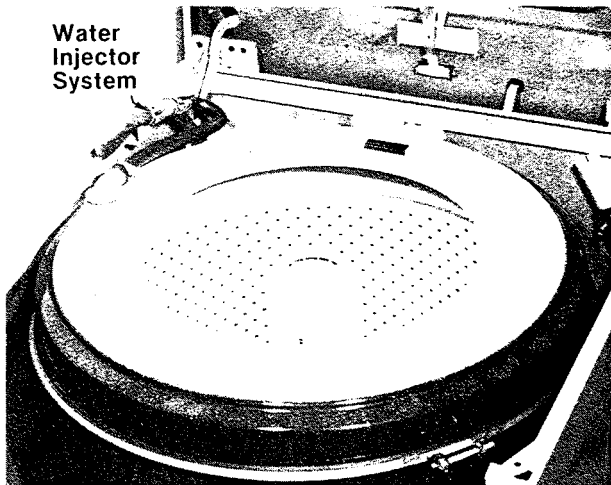
## "12" MODELS



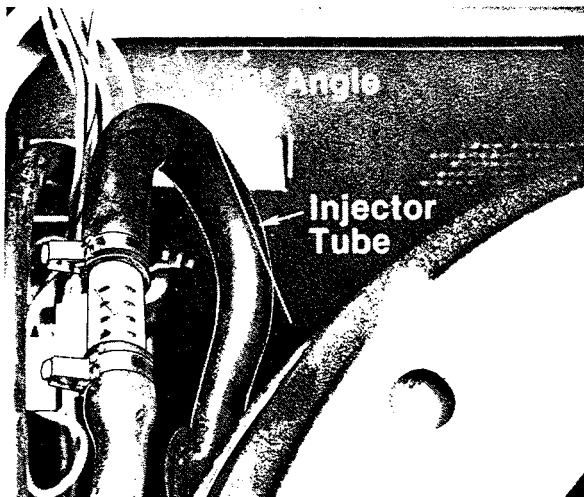
# WATER INJECTOR SYSTEM

Water from the water valve enters the tub through an anti-siphon injector valve system.

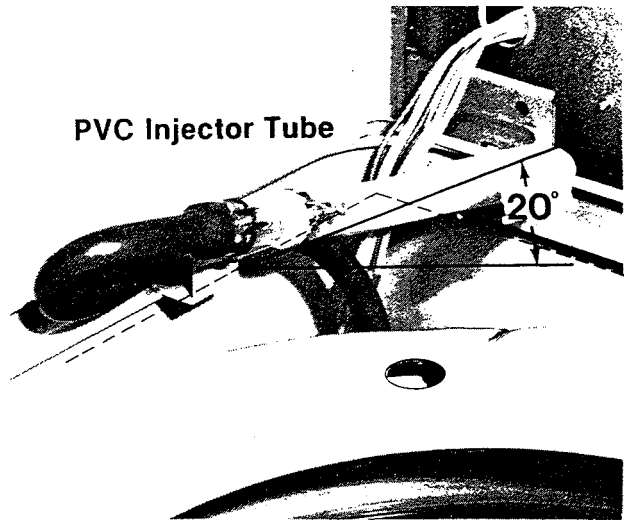
The parts involved are the injector hose (from the water valve to the injector housing), the injector nozzle (a closed-end nozzle with slots in the sides), the injector valve (a rubber sleeve which fits tightly over the injector nozzle), the injector housing (the nozzle and valve go inside the housing), and the injector tube (the hose between the injector valve housing and the tub cover).



Several different injector tubes were used on the "08" and "10" model washers. Both rubber and PVC were used. Depending on rubber or PVC, the mounting angle of the injector tube is either 60° below a horizontal plane for the rubber tube or 20° above a horizontal plane for the PVC tube.



PVC Injector Tube



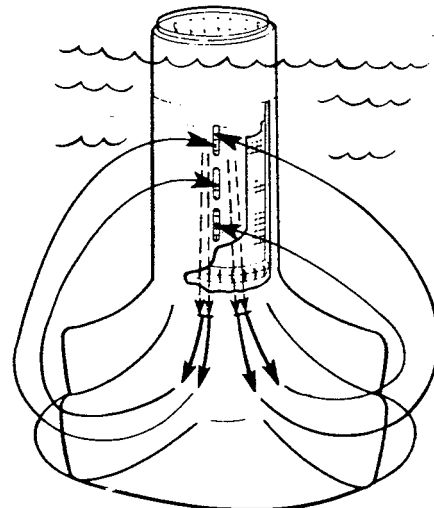
The "12" model washers use a new twist-to-lock injector tube elbow. This fits into an entirely new tub cover. In addition to the locking injector tube elbow, water from oversplash is more easily drained back into the tub through repositioned drain holes.

## AGITATOR

The "power fin" agitator used on all current models of Maytag automatic washers creates a unique water action which pushes water through the clothes while moving them from the top of the water to the bottom and then up again. The water action tends to keep the clothes away from the agitator and out toward the tub.

The water circulation pattern keeps the water constantly moving through the lint filter.

Water enters the barrel of the agitator through the slots around the top. It passes through the lint filter and comes out the holes at the bottom of the agitator barrel.



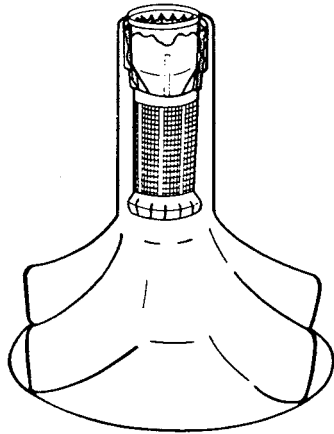
**Keep in mind the lint filter in the barrel of most models is only a secondary method of lint removal.** The majority of lint is removed through the holes in the tub during the spin cycle. Maytag's "swirl-away" action spins the lint-laden water out through the holes and down the drain.

## FABRIC SOFTENER DISPENSER

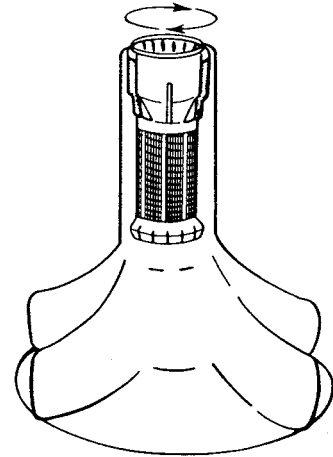
The built-in fabric softener dispenser, located in the top of the filter agitator is designed to dispense fabric softener into the final rinse automatically. **Since bleach and granular detergents should not be used in the final rinse, they should not be placed in the dispenser cup.** Always follow the manufacturer's directions for usage of fabric softener.

Place diluted softener in dispenser cup before starting washer. During agitation, it remains in the cup.

At the start of the spin for the final rinse, the softener is spun up to the top of the cup and leaves the cup through the slots around the top circumference of cup.

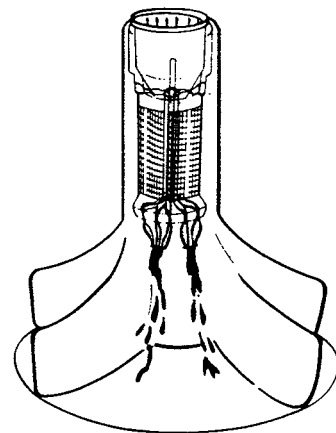


The softener is held in the filter cap by centrifugal force during the remainder of the spin cycle.



At the end of the spin, the softener drains down through the agitator and into the washbasket as the water enters for the final rinse.

**CAUTION:** Do not interrupt the spin cycle when fabric softener is being used. This will cause the softener to be dispensed prematurely and it will not be properly utilized. This can result in "grease" spots on the clothes.



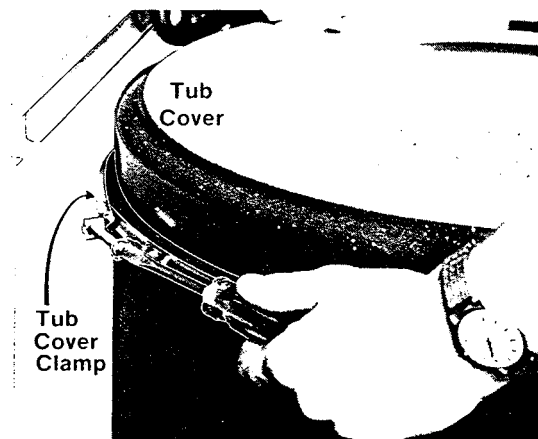
# TUBS AND POWER UNIT ACCESS

## REMOVING WASH BASKET

1. Raise lid and remove agitator by pulling straight up. **NOTE:** When replacing agitator, be sure to push down until it snaps down over stop ring. On "12" models, remove set screw on agitator.

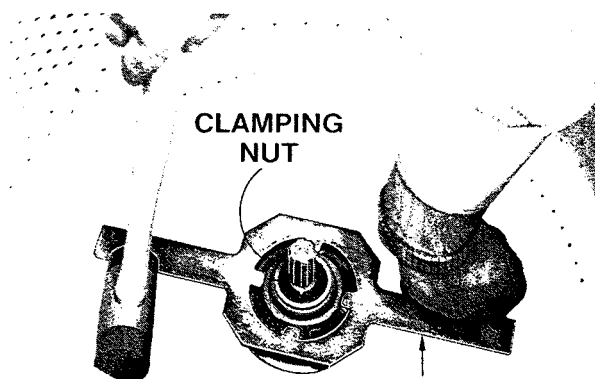


2. Remove the front panel and loosen the top cover and tilt the top back. Remove the tub clamp and the tub cover.



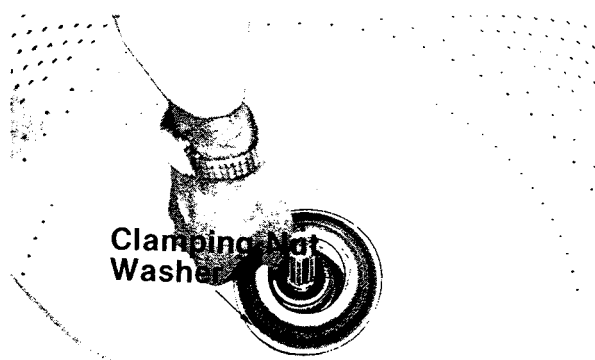
**NOTE:** When reassembling the tub cover and gasket, be sure all sides of the gasket are clean. Be sure that the triangular rubber gasket is not twisted. All sides of the gasket are equal and it will make no difference which side is placed against the tub and tub cover. Wet the gasket before repositioning between the tub cover and outer tub to facilitate installation.

3. Use Maytag spanner wrench, Part No. 38313, to remove clamping nut and inner tub. This is a left-hand thread so it must be turned clockwise. A mallet will be required to loosen the nut.



**NOTE:**  
THIS IS A LEFT  
HAND THREAD

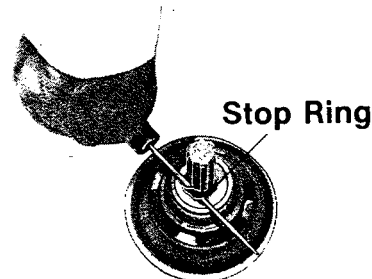
4. Remove the clamping nut washer.



5. The inner tub can now be lifted out.

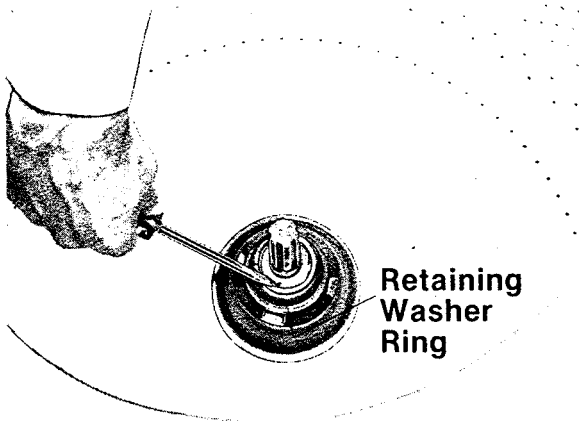
## CENTER SHAFT SEAL

1. Remove stop ring.



The rubber stop ring is used on all washers which do not have the lock screw in the agitator.

2. Pry out lock ring for retaining washer.

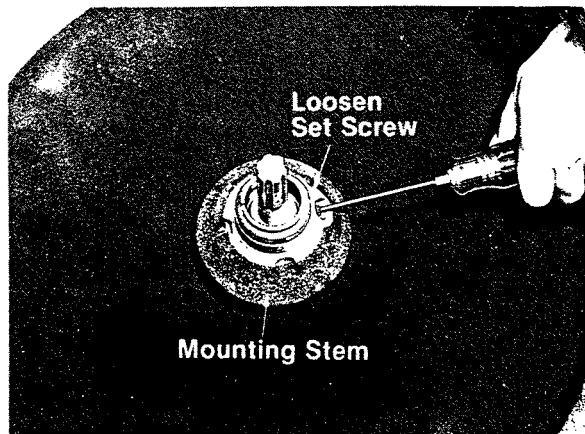


3. Remove retaining washer.

In some cases of persistent leaks in the center seal area, an additional (second) retaining washer will provide extra pressure on the seal.

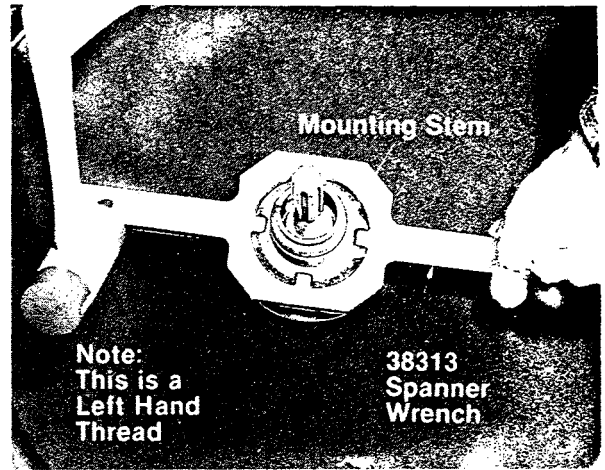


4. Remove seal by prying out.



## MOUNTING STEM

1. Use an Allen head wrench to remove the set screw in the mounting stem.



2. Use a 38313 spanner wrench to remove mounting stem. This a left-hand thread. Turn clockwise to remove.

When removing the mounting stem, inspect it carefully. If it shows signs of water seepage, we recommend it be replaced.

If a new mounting stem is being used, remove the spring clip from the mounting stem being replaced.

3. When the mounting stem is lifted off, you have access to the boot seal. Remove boot seal by twisting clockwise. Do not grasp around carbon ring.



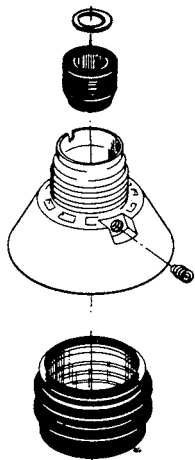
## REPLACING THE SEAL

Wet inside bottom lip of boot seal. Turning clockwise, twist down against tub lips and seat evenly.

1. Reinstall the mounting stem. Lubricate carbon ring with thin film of transmission oil. When the mounting stem has been

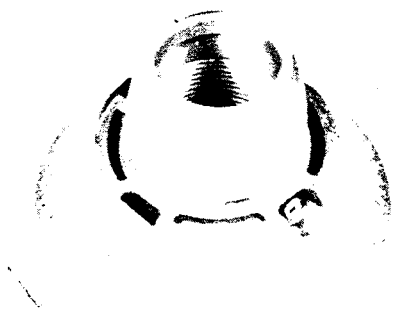
turned on the centerplate stem and hand-tightened, use the spanner wrench to seat the mounting stem. Tap the spanner wrench several times with a hammer to seat.

2. Before inserting the set screw into the mounting stem, lubricate the hole in the mounting stem with Maytag 56016 grease. Be sure to tighten the set screw securely.



**When tightening the set screw in mounting stem, two items are important:**

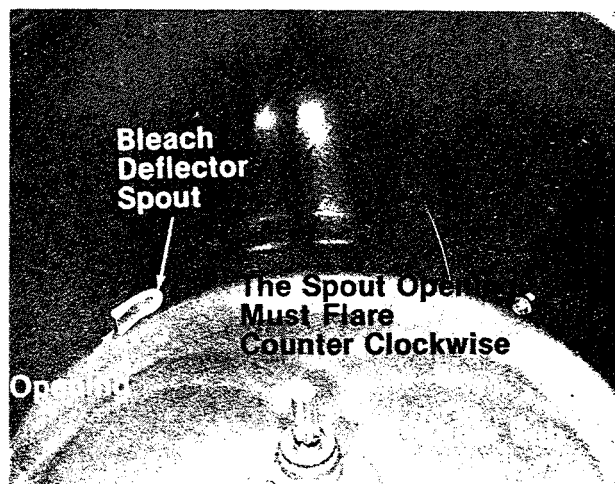
1. When the set screw bottoms out, there should be about two to four threads of the screw still showing. If not, it is probably in one of the water relief grooves. **Do not leave the mounting stem in this position.** Remove the set screw and tighten the mounting stem about another 1/8 turn. Replace set screw and again check for exposed threads as above.



2. Do not overtighten set screw. The recommended method is to first tighten set screw using the short leg of the Allen

wrench in the screw head, and the long leg for leverage. This will place a dimple in the gear case cover neck. Then loosen the set screw and reverse ends on the Allen wrench. Retighten the set screw using the short leg for leverage. This will leave the set screw tight but will not put extra pressure on the upper bearing in the neck of the gear case housing.

When tightening the mounting stem, do not overtighten. Factory specifications call for 20 ft. lbs. of torque as normal and no more than 80 ft. lbs. of torque if additional tightening is required to move set screw position. If you overtighten, there is a chance of swedging the tub bearing sleeve and creating "drag" in spin.



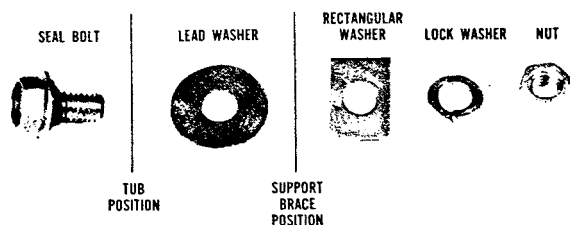
**NOTE:** With the inner tub removed, the bleach deflector spout may be removed. Pull the tab off from the outside and snap deflector out. It must be replaced as shown in the following to prevent water from being forced out during spin.

## OUTER TUB REMOVAL

Loosen clamps and remove drain hose and air dome from outer tub.

Remove three bolts that hold the outer tub to the tub braces. To facilitate removal of tub bolts, remove outside nuts, (prevent turning of the bolt head to avoid damage to the seal washer) lock and retaining washers and push tub bolts into the tub. Lift off outer tub.

Note location of tub and seal bolt, lead washer, brace, retainer washer, washer and nut.



Always tighten using the nut on the outside of the tub brace and hold head with wrench. Tightening the seal bolt from the inside may cause damage to the seal.

#### To remove outer tub bearing:

1. Because of the porcelain tub and molded retainer, it is not practical to drive the tub bearing from the tub. To remove the bearing from the tub, elevate the tub so that the porcelain drain tube clears the floor. This could be done by placing a 2 x 4 or doubled over corner post under the tub.
2. Apply pressure on the bearing, pushing it from the tub. This can be done by stepping on the bearing.

#### To replace tub bearing:

1. Turn tub over and start bearing into bottom of tub.

**NOTE:** Caution should be exercised to see that the tub bearing is started into the tub straight to prevent an erratic egg shaping when seated in the tub.

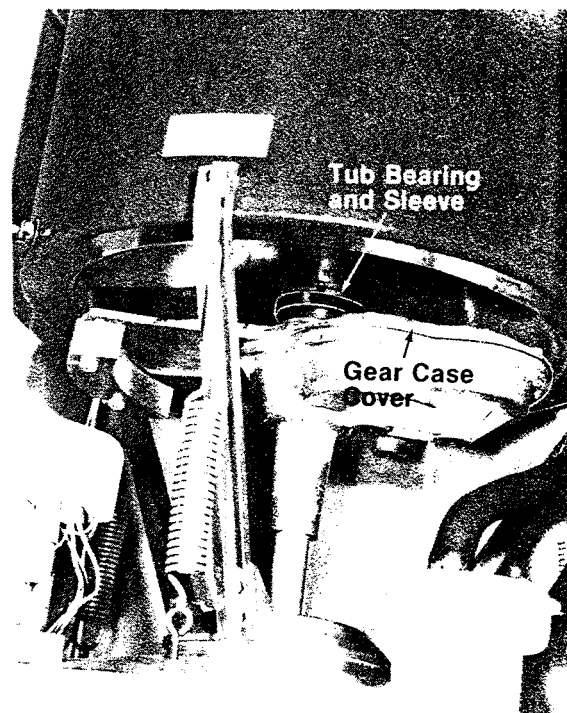


2. Press bearing into place by applying pressure. This may also be done by standing on the bearing. To avoid getting dirt in the bearing, place a protective cloth over the bearing before standing on it.

## SEAL LEAKS

If water leaks from the center shaft seal or boot seal, it will show up on top of the gear case cover. A few minutes of looking with a flashlight will direct you to the seal that is leaking.

When you look up under the outer tub, you will be able to see the bottom of the tub bearing and the bottom of the tub bearing sleeve where it sits on top of the gear case cover.



If the water is coming from the slots in the tub bearing, suspect a boot seal leak.

If the water is coming out underneath the bearing sleeve right down on the gear case cover, suspect a center shaft seal leaking or mounting stem set screw leak.

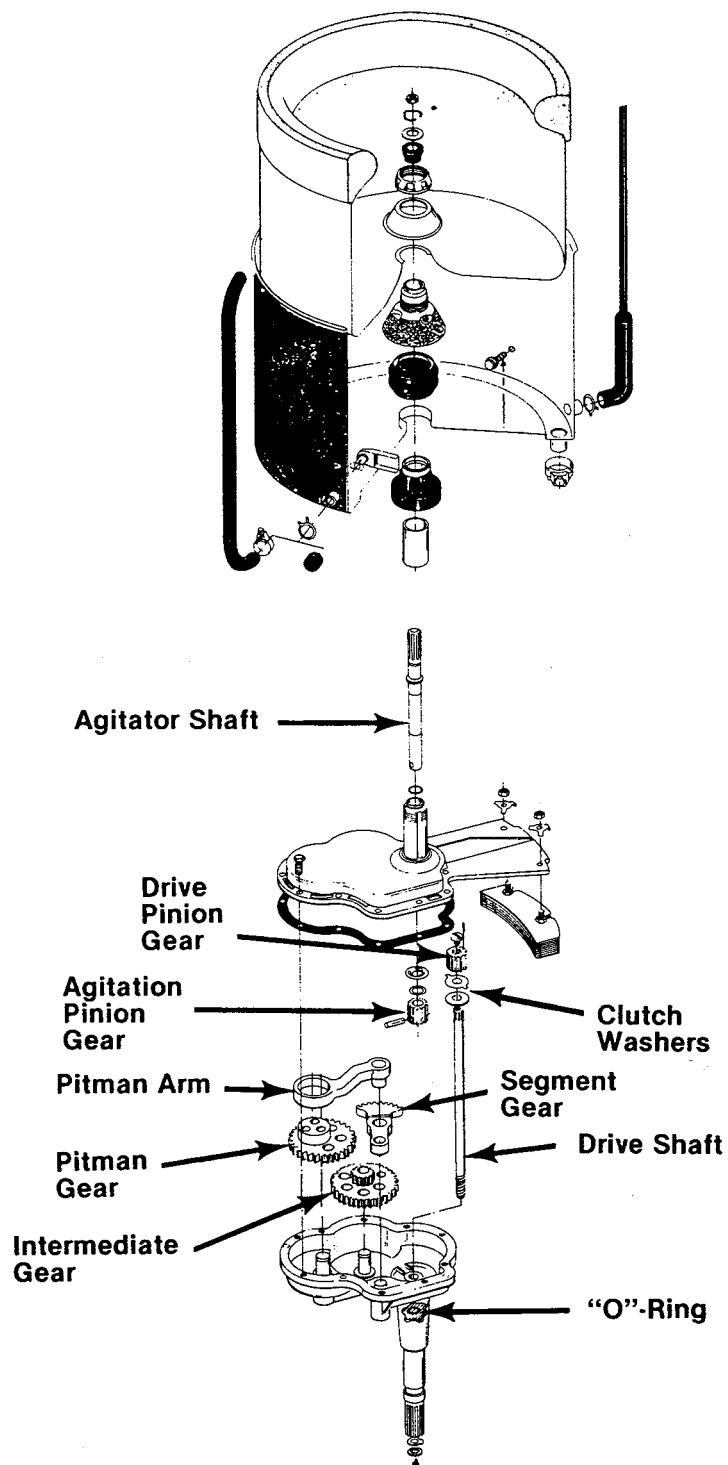


# TRANSMISSION

With both tubs removed, you can remove the top half of the transmission.

If the entire transmission is being removed, the drive lug must be removed. Then the pulley can be turned off. This will allow the complete transmission to be lifted out of the brake assembly.

If you have a transmission failure under the five-year transmission warranty, the complete transmission may be replaced.



# HOW IT WORKS

## POWER UNIT

The helical drive mechanism used on the Maytag washer is simple---not requiring a special device or linkage normally used to shift the washer from agitation to spin.

As you look at the following drawings, keep in mind that the parts shown in dark (damper, brake housing, brake drum and outer race of the spin bearing) are attached to the base and never rotate.

The drive mechanism utilizes a reversible motor and a helical (threaded) drive shaft. A pulley which is threaded to the helical drive shaft moves either up or down the shaft dependent upon the direction it is turned by the drive motor by means of a drive belt.

## AGITATION

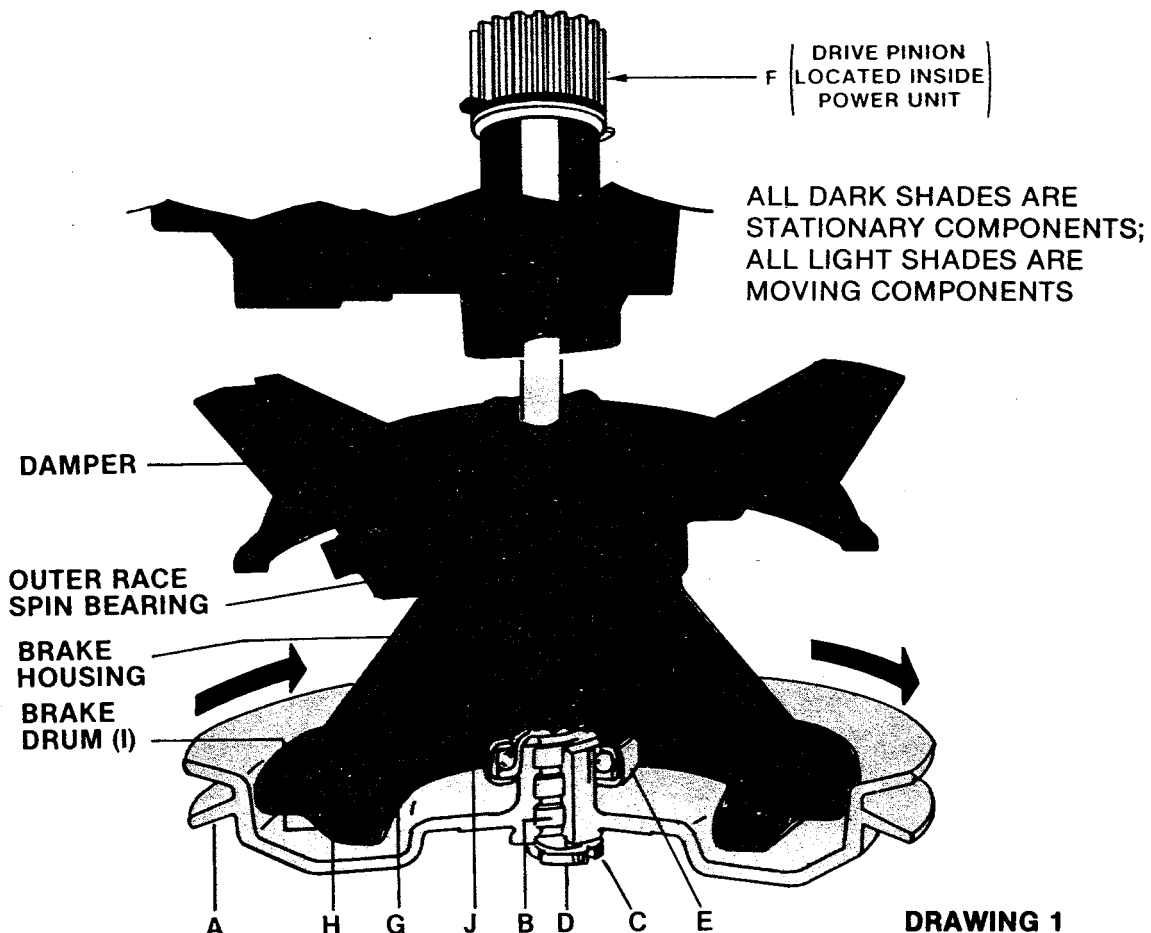
With the pulley (A) being turned clockwise as indicated in Drawing 1, it moves down the

helical drive shaft (B). As it rotates down the shaft, a lug (C) on the pulley comes against the drive lug (D) which is splined to the helical drive shaft.

At this point the drive shaft turns with the pulley. The pulley bearing (E) which is resting on top of the pulley, also rotates with the pulley, drive lug and helical drive shaft.

At the top of the drive shaft is splined a gear (F) which, as it rotates, drives a series of gears causing the agitator to move back and forth in an arc creating the water action for the wash.

The tub and transmission are held in place and cannot turn because the brake rotor (G) and brake shoe (H), which is splined to the transmission, is being held down against the brake drum (I) by the brake spring (J).



## SPIN

When the motor reverses, the pulley will turn in the direction indicated in Drawing 2. This causes the pulley (A) and bearing (E) to turn. The pulley climbs the threads on the helical drive shaft (B) overcoming the force of the brake spring (J) and lifts the brake rotor (G) and brake shoe off the brake drum (I).

As the pulley climbs the shaft and overcomes the force of the brake spring there is a downward pull on the shaft.

Within the transmission there are two washers which act as a spin clutch. This is a friction clutch consisting of a bronze washer (K) which is splined to and turns with the drive shaft, and between this washer and the pinion gear is a steel washer (L) with ears, which is keyed to the housing.

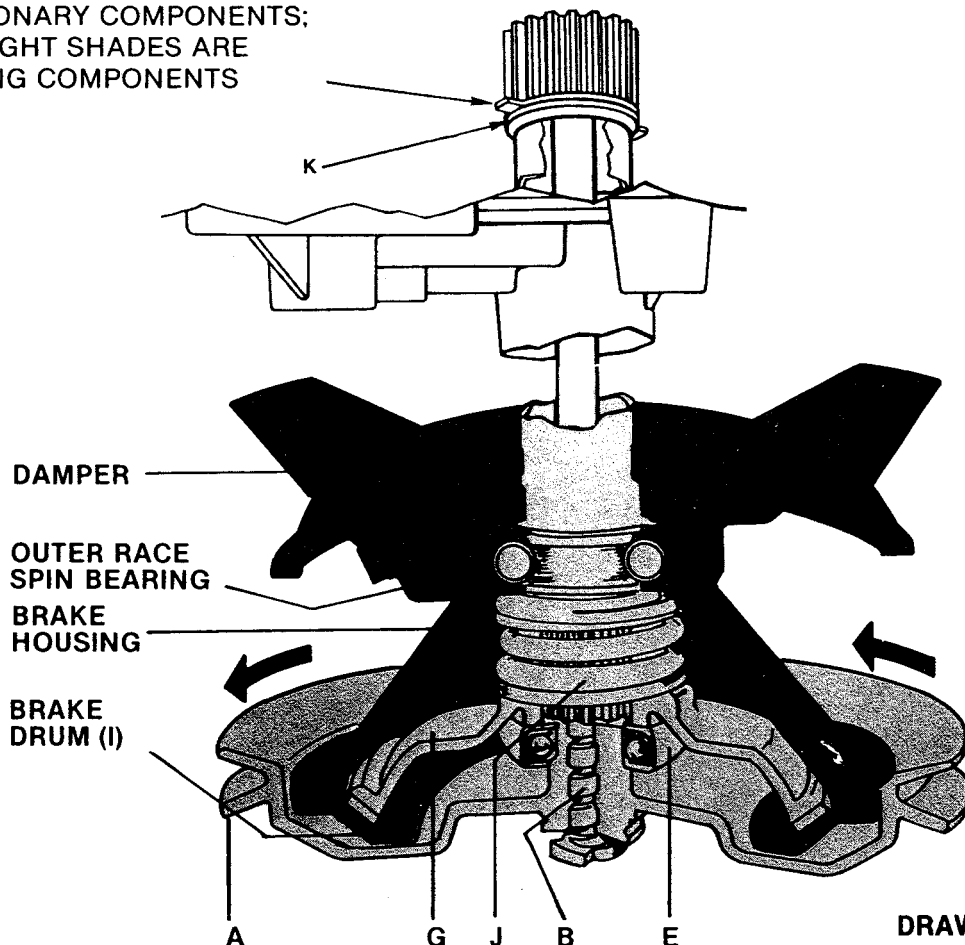
As the helical shaft is pulled downward the two clutch washers under the pinion are forced together. This is done rapidly and slippage occurs only during the first two or three revolutions, until the film of oil between the two clutch washers is forced out.

The drive occurs when the washers are forced together and the pulley has climbed the shaft as far as it can. The driving force has locked the pulley, brake rotor, drive tube, and gear case together and all will turn as a unit in the same direction as the pulley is turning, causing the tub to spin (counterclockwise viewed from the top).

## SPIN CYCLE COMPLETED

When the washer reaches the end of the spin cycle, the driving force is removed. Thus, there is no force supplied to lock the components together or to compress the brake

ALL DARK SHADES ARE  
STATIONARY COMPONENTS;  
ALL LIGHT SHADES ARE  
MOVING COMPONENTS



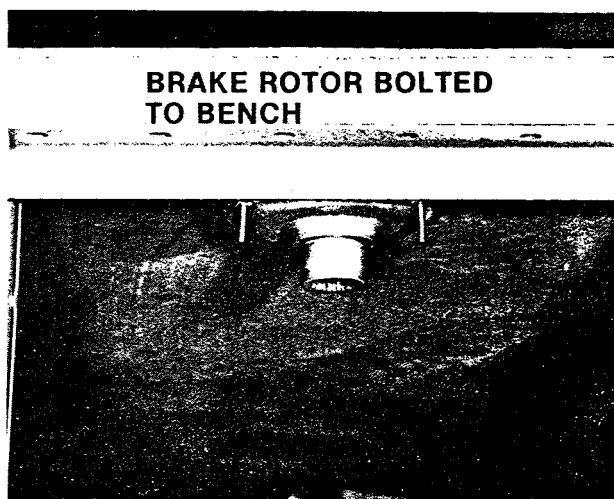
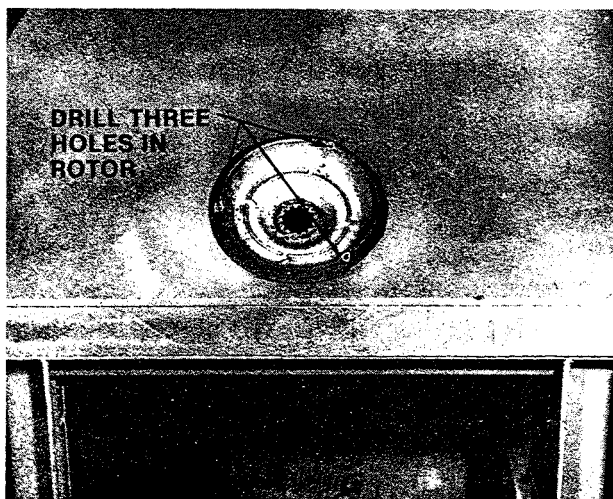
DRAWING 2

spring. The momentum of the spinning tub drives the pulley downward allowing the brake spring to press the brake rotor down. The rotor presses the oil in the lip of the brake drum out of the way and contacts the drum surface and stops the tub.

## TRANSMISSION (POWER UNIT, GEAR CASE)

The transmission assembly can be repaired or replaced. Depending on the particular model, either a long shaft or short shaft lower housing is used.

A convenient holder can be made by securing an extra brake rotor under a workbench surface which has a hole cut through.

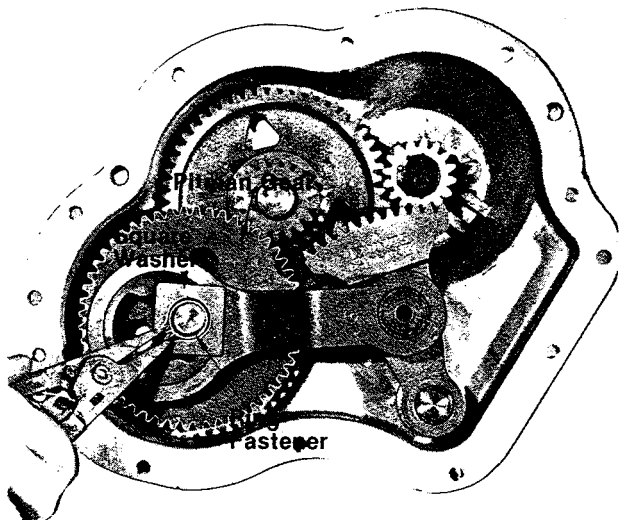


Remove eight bolts securing transmission cover (upper half) from lower housing.

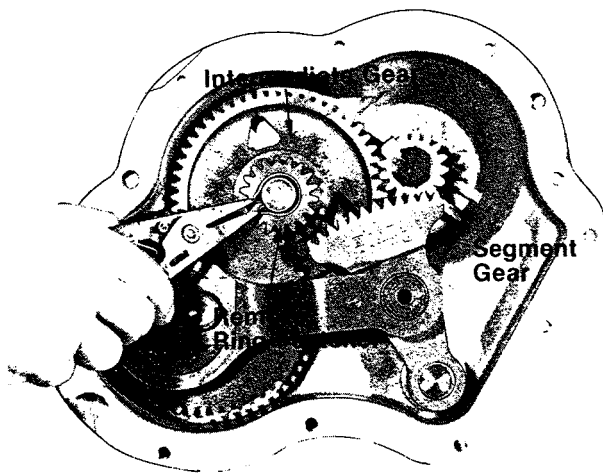


### To remove gears:

1. Remove ring fastener and square washer holding gear for pitman, except on "12" models which do not have snap ring or washer.



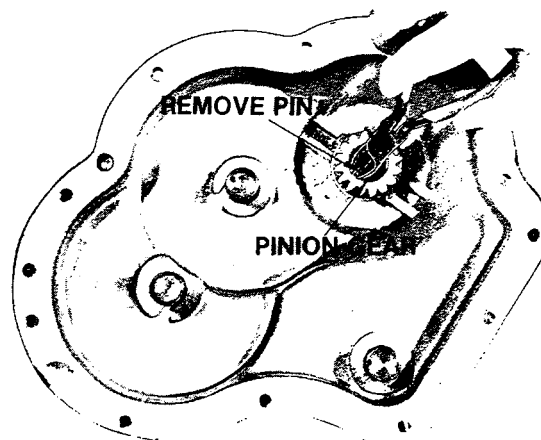
2. Remove ring fastener holding intermediate gear on "08" and "10" models only.



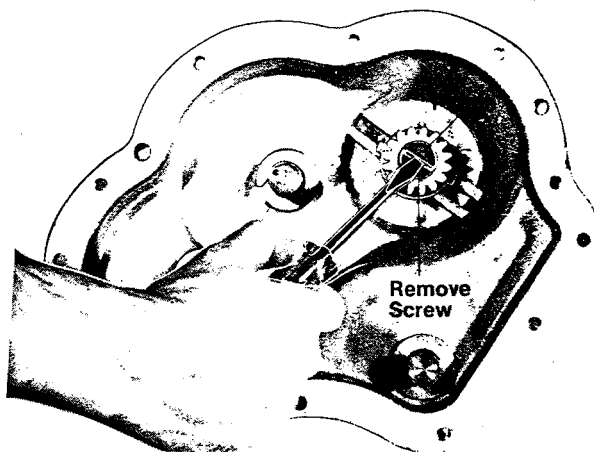
3. Remove gears.

4. Remove pin from pinion gear using a pair of side cutters to pry up. When replacing

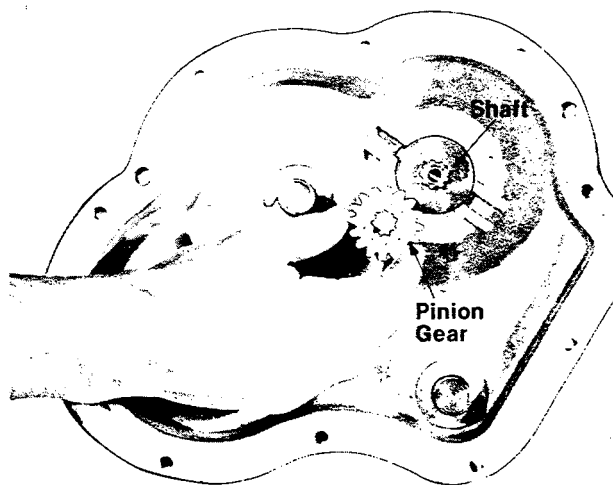
the pinion gear, the pinion must be inserted into a new hole since the hole used originally has been enlarged.



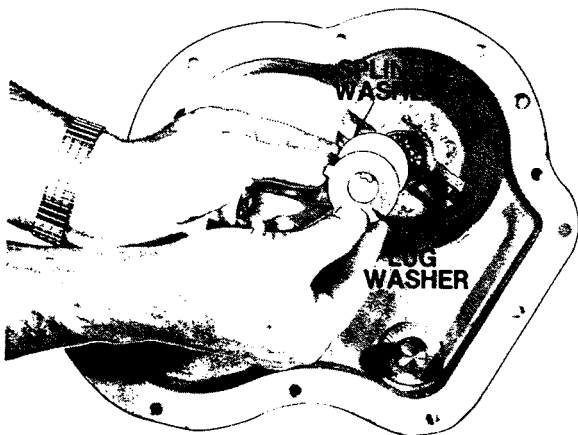
5. Remove screw holding pinion to center shaft.



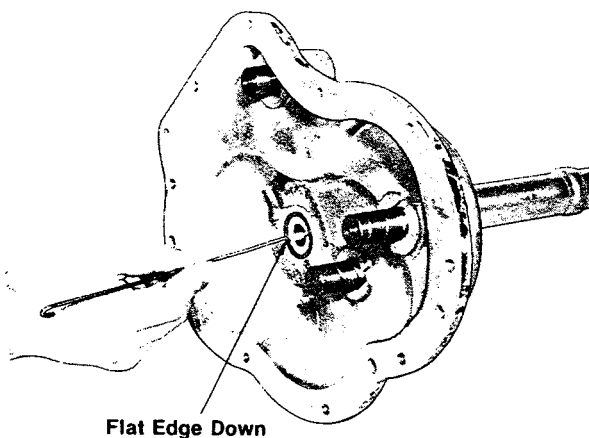
6. Lift pinion gear off center shaft.



7. Remove spline washer and lug washer. Note order of assembly. Spline washer goes on first.



8. Remove center shaft by pulling and turning clockwise to avoid damaging the "O" ring seal in the drive tube.



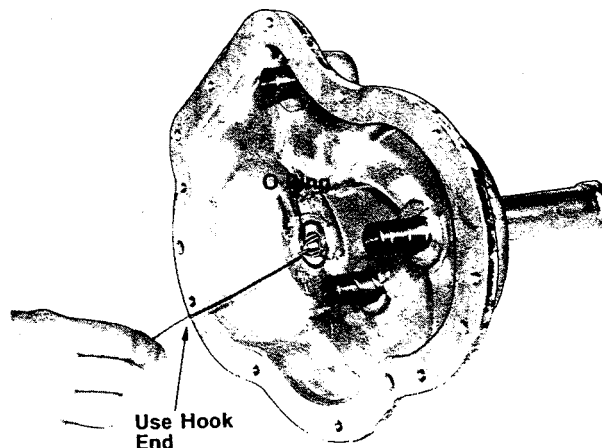
## "O" RING SEAL

A damaged "O" ring seal will allow power unit lubricant to leak down the drive tube. Seal is positioned in a groove in the drive tube approximately 1-1/2" from the upper end of the housing.

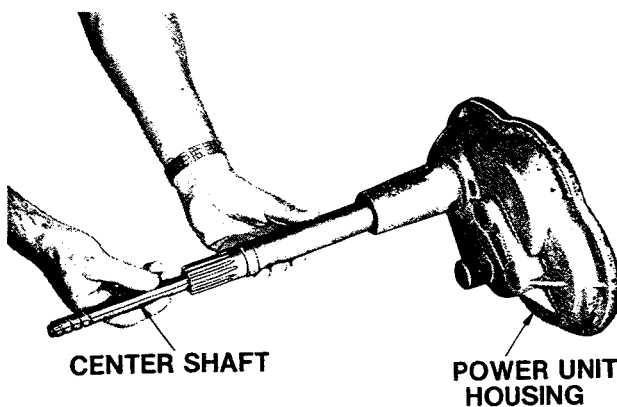
A handy tool for removing and replacing the seal can be constructed from a short piece of coat hanger. Make a hook on one end of the hanger and on the opposite end, bend the tip down at approximately a 45° angle. File the tip down to a flat sharp edge.

## To remove "O" ring seal:

1. Insert tool (with flat sharp end down) into tube and pry "O" ring out of groove.



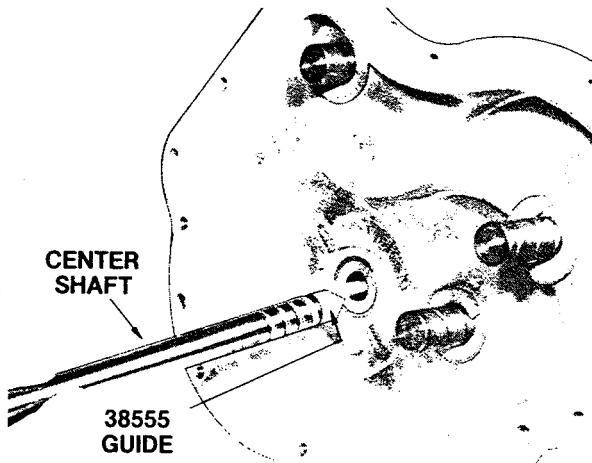
2. Using opposite end of tool, hook "O" ring and pull out.



## To replace "O" ring:

1. Insert center shaft into drive tube end of power unit housing to a point just below the groove for the "O" ring.
2. Place "O" ring in housing end of tube and push into groove with hook end of tool. Make sure "O" ring is completely seated in groove.
3. Place Maytag guide, Part No. 38555, over helical drive portion of shaft to prevent damage to "O" ring seal. For additional protection, coat guide with power unit oil.

4. Insert center shaft into power unit housing.



The components may now be reassembled by reversing the procedure outlined for disassembly.

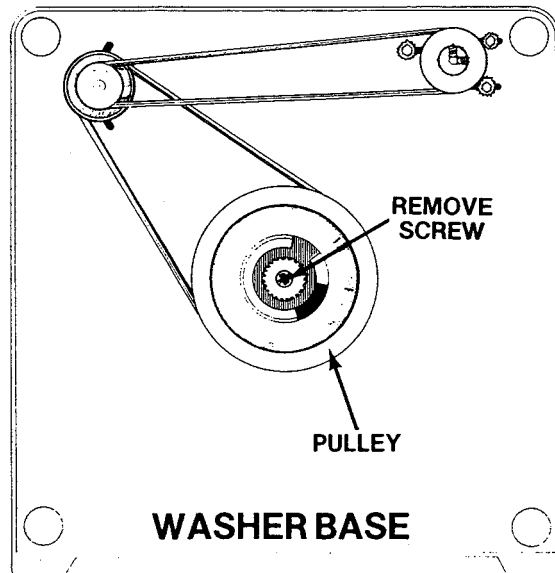
Use new gasket and new power unit oil.

## PUMP REMOVAL

Remove the front panel of the washer. Next place a pan under the hoses of the pump. Remove the two hoses from the pump, catching the water that is trapped in the hose in a shallow pan.

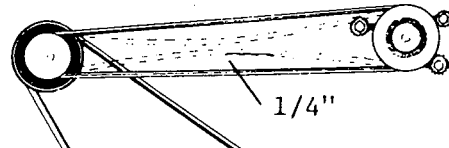


Tilt the washer back and remove the belt. Remove the three 5/16" screws from the pump. The pump can now be lifted from the base. A 6" length of 4 x 4 lumber makes a good safety block to place under the left front washer leg.



## ADJUSTMENT OF PUMP BELT TENSION

The pump mounting slots in the washer base are long enough to provide an adequate range of adjustment.



No more than 1/4" between inner surface of belt.

If necessary, tilt the washer again, loosening the pump mounting screws so that the pump can be adjusted to obtain the correct maximum 1/4" dimension.

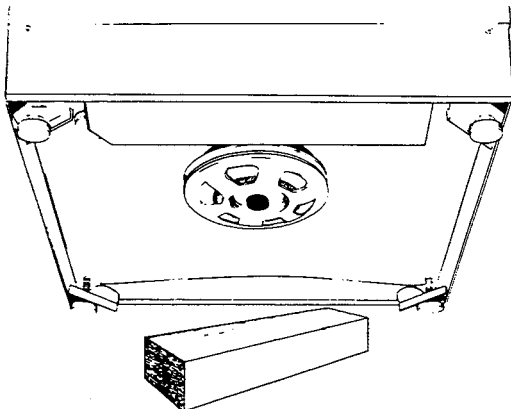
Reinstall front and back panel.

By using this method to adjust the pump belt, you will insure that the correct pump belt tension is provided.

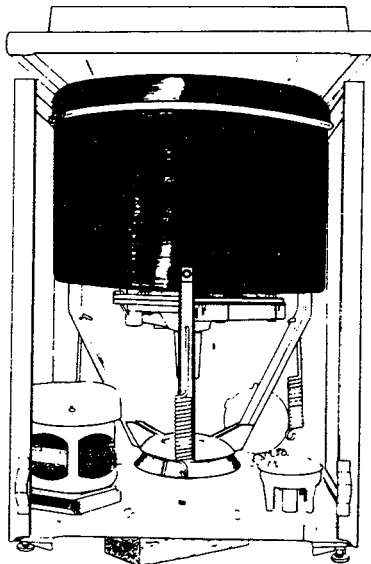
## DAMPER AREA SERVICE

### To replace or lubricate damper pads:

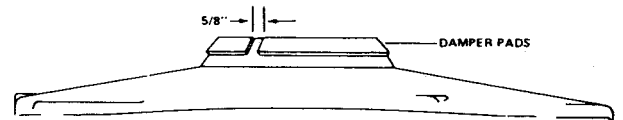
1. Remove two screws holding front panel and remove front panel.
2. Remove two bolts holding top cover and raise top cover. **NOTE:** Tape lid to prevent it from striking the control panel.
3. Remove nuts from three eyebolts. Nut positions can be marked by placing strips of electrical tape around bolts just above nuts before loosening.
4. Remove drive belt.
5. Tip washer back and lay 4 x 4 wood block under center drive pulley.
6. Set washer down on top of the wood block.



7. The complete assembly of the tubs and damper should be pushed up from the base far enough to get to the damper pads.



8. Scrape old pads from base.
9. Use a degreasing agent such as alcohol to remove any grease from area.
10. Apply rubber adhesive, Maytag Part No. 55978, to area where old pads were removed.
11. Apply pads to base and let dry. The top surface of pad should be located  $3/32$ " below center opening in base. The distance between pads should be about  $5/8$ ".



12. Lubricate damper pads with silicone grease, Maytag Part No. 2-4999, or 2-3959 (jar).
13. Reassemble washer.
14. Check tub centering and adjust if needed using nuts on eyebolts.

## DAMPER REPLACEMENT

### If damper replacement is needed:

1. Remove brake package.
2. Remove tub to pump hose at bottom of tub.
3. Remove injector tube from tub cover.
4. Remove nuts from centering spring eyebolts.
5. Lift entire assembly (tubs, gear case, damper, etc.) out of washer and lay on floor. (We didn't say this would be easy.)
6. Remove bolts from damper ears which secure tub braces.
7. Raise old damper toward tub bottom to free it from tub braces.



8. Turn damper so ears clear tub braces and pull down and off of spin tube.
9. Install new damper using reverse order being sure boss for brake clip will be aligned toward water pump position.

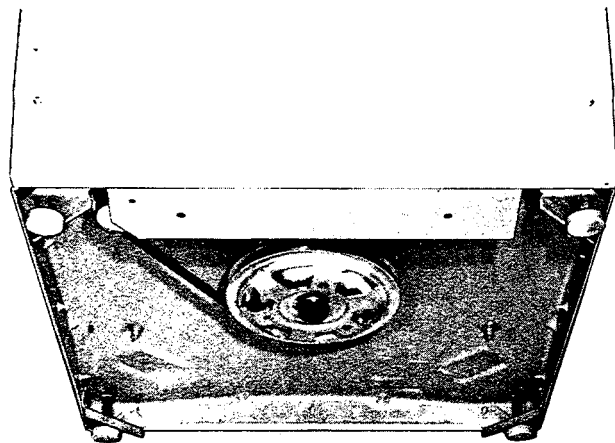
## DRY BRAKE

The normal symptom of a dry brake package is a screeching noise at the end of the spin cycle as the tub comes to a stop.

The brake can be lubricated without removing it from the washer.

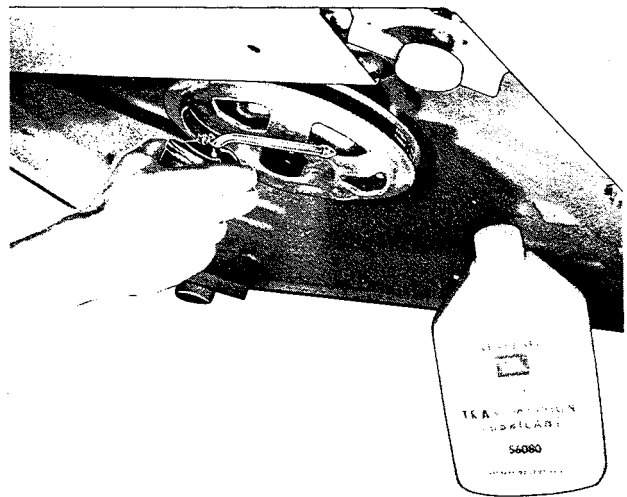
### To lubricate brake:

1. Disconnect the electrical supply to the washer.
2. Put tub block in tub and lay washer back far enough to get to the pulley and brake.
3. Block left front leg to prevent washer from falling.



Lay Washer Back

4. Squirt about one tablespoon of power unit oil, Maytag Part No. 56080, over lip of brake package. An oil squirt can works very well. (Or take pulley off.)

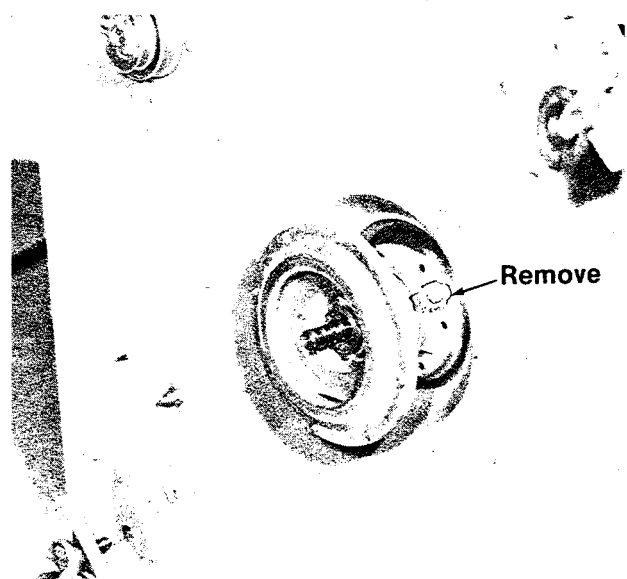


5. Turn the pulley on the shaft until the brake is disengaged. With the brake disengaged, the oil will run under the brake lining. Turn the pulley several times to insure proper lubrication.

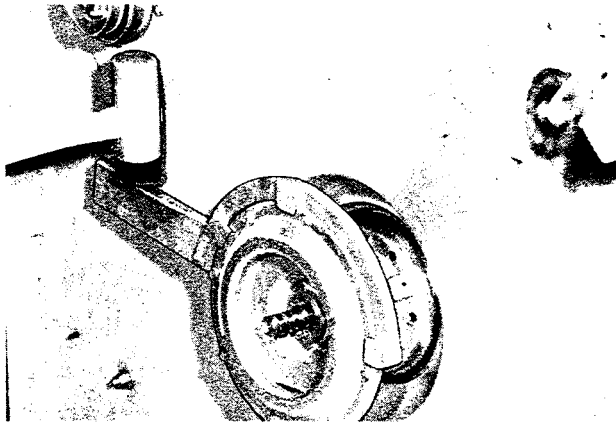
## BRAKE PACKAGE REMOVAL

After drive pulley has been removed, the brake assembly can be removed as follows (power unit in place):

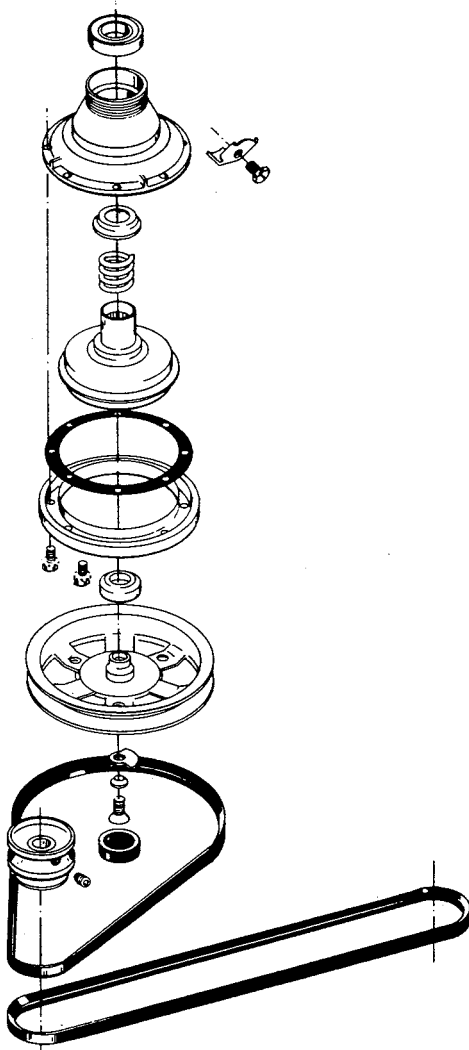
1. With tub block in place, the tubs and power unit will be parallel with the cabinet. Remove hex bolt and retainer clip in damper holding the brake package.



2. Use the 38315 special tool to unscrew the brake package assembly from the damper. When the brake package is free, pull out to disengage it from the spline surface of the drive tube.



3. After brake package has been removed, the radial bearing may be removed from top of brake package by tapping on the side of the brake package.



### To replace brake package:

1. Place radial bearing in top of brake package.
2. Use a coating of center seal grease to protect bearing from water.
3. Insert brake package onto drive tube splines.
4. Start threads of brake package into damper turning in by hand. This won't be easy because you have to lift the tub and transmission.
5. Be sure that tub block is in place keeping tubs level so as to prevent binding on brake package threads.
6. When turning brake package into the damper, allow power unit to turn so that you do not have to overcome the friction of the brake.
7. When threaded tight, use special tool 38315 and hammer to seat brake package firmly in place.
8. Locate retaining clip and tighten damper bolt securely into damper.

### SETTING THE DRIVE LUG

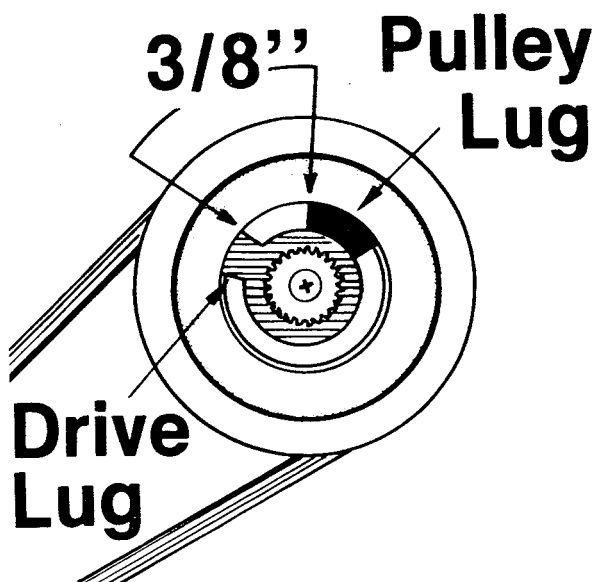
Place rotor bearing on drive pulley with cupped side down over hub of pulley.

Turn the drive pulley onto the shaft and run it up as tight as you can (you may have to hold wash tub or transmission). This will bottom out the transmission in the brake rotor. Note position of raised portion of drive pulley hub.

Install the drive lug on the end of the drive shaft directly across from the pulley lug (180°) with the pulley still run up tight. One side of the drive lug is flat compared to the other side. This flat side should be toward the pulley.

Release the pulley and let it drift down against the drive lug.

Now run the pulley back up the drive shaft just until you begin to encounter resistance. Check the positions of drive lug and pulley lug. Wherever the pulley lug ends up, consider this to be the 12 o'clock position. The drive lug should be at 9 o'clock. If not, reposition drive lug (with pulley at this point of resistance). The two lugs should have about 1/4" to 3/8" space between them.



## VALVES

### WATER VALVE

#### THERMOSTATIC VALVE - ACCESSORY ("08" ONLY)

If water temperature or pressure differentials provide inadequate warm water mixes, a thermostatic valve may be installed. For these situations, an accessory thermostatic valve, Part No. 2-4436, is available. It is designed to control the cold water side of the mixing supply to a 75° temperature.

This 75° cold water, mixing with the hot supply, insures a "hotter" warm water temperature.

#### WATER VALVE OPERATION, NONTHERMOSTATIC (ALL MODELS)

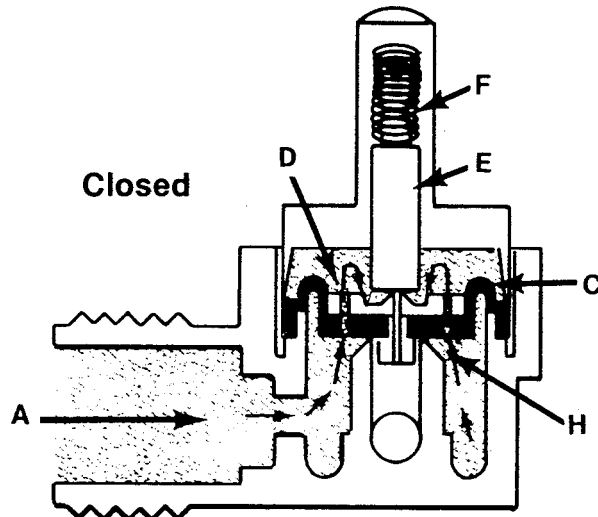
The following is an explanation of the operation of the water valve and points out the importance of the filter screens.

Filter screens **MUST** be used in the inlets of the water valve to minimize unnecessary valve failures. These screens are used in the valve inlet to prevent foreign materials from entering the valve. Particles of sand, soil or mineral deposits gathering in the valve can block the diaphragm "open" or hinder solenoid plunger operation.

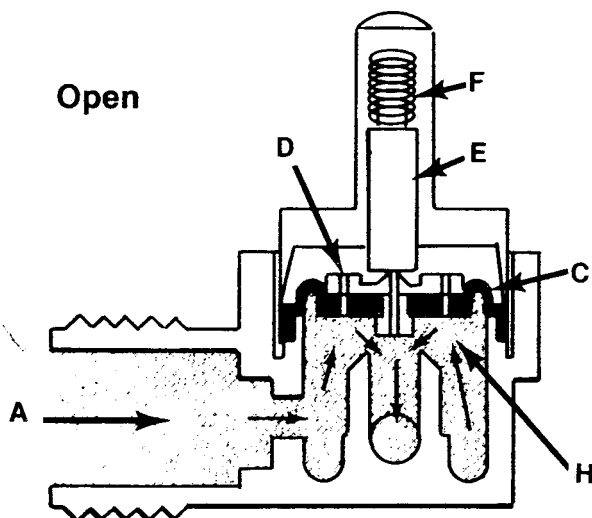
#### WATER FLOW

The water valve used on all Maytag automatic washers is designed to operate in a pressure range of 30 to 120 p.s.i. If for example, the water pressure at the inlet valve is 40 p.s.i., water from inlet "A" is pushing against diaphragm "C" at 40 p.s.i. The solenoid plunger "E" and spring "F" alone are not strong enough to keep the diaphragm in a closed position, blocking the flow of water until the solenoid is energized. To do this, small bleed holes "D" about the size of a pin, are put in the diaphragm to allow water to flow into the plunger area "H". The water in the plunger area equalizes the pressure on

both sides of the diaphragm. The spring pushes the plunger down into the center of the diaphragm closing center opening, until the solenoid is energized.



During the fill portion of the cycle, the solenoid is energized, creating an electromagnetic field and pulling the plunger "E" away from the diaphragm. This allows water to escape out the opening "G", thus having little pressure in the plunger area. The water pressure from the supply forces the diaphragm "C" open and allows water to run under the diaphragm and out the outlet of the valve and into the washer. When the washer fills to selected water level, the solenoid is de-energized and the plunger spring "F" pushes the plunger back into the diaphragm opening "G". Water is forced through the bleed holes "D" until an equal pressure is attained on both sides of the diaphragm thus stopping the flow of water to the washer.



Assume for a moment, the solenoid is energized and the washer is filling. If a foreign particle reaches the water valve "A" and there are no screens to stop the particles, it continues on into the valve to the diaphragm "C" and the particle lodges in the small bleed hole. This permits the water to continue to flow under the diaphragm, to the outlet and into the tub, because the water cannot pass through the bleed holes to equalize pressure on both sides of the diaphragm to close the diaphragm seat.

## INLET HOSE SCREENS

Both the inlet hoses have screens to help filter out the foreign material that may have come from the water source. A fine mesh screen is used in the water valve inlet to filter out the material that may pass through the inlet hose screen. **Always check both inlet hose and valve screens.**

IF FILTER SCREENS HAVE BEEN REMOVED, BE SURE SCREENS ARE REPLACED TO MINIMIZE UNNECESSARY VALVE FAILURE.

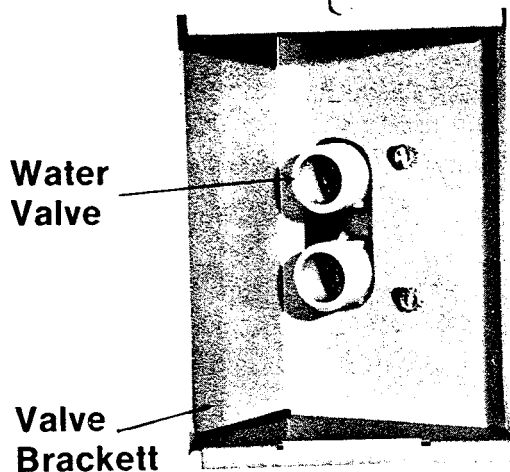
Knowing how the valve operates, you can see what happens if the valve inlet screens were removed. A piece of sand, rust from the plumbing, or any foreign particles entering the valve could block the bleed hole or holes "D" in the diaphragm.

## NO FILL

Check water valve coils for continuity. These checks should be made with the electrical supply disconnected from the washer. A water valve coil should have a resistance of between 500 and 900 ohms. For convenience, the Maytag appliance test meter scale is marked open and closed to indicate

continuity or an incomplete circuit. If there is an incomplete circuit, there is a bad coil. If a coil is bad, the water valve should be replaced.

**Remove Screws**



## OVERFILL

Put machine into a fill, preferably a warm setting. While the washer is filling, raise the lid or pull the power cord. If the water valve does not stop flow of water, the valve is at fault. If the water flow stops, the problem is electrical. Check water level control and wiring.

## WATER VALVE REMOVAL

**Unplug washer and shut off both hot and cold water faucets.**

Slide the washer out from the wall. Place a pan or bucket below the hoses directly under the water valve. Remove both hoses catching excess water in pan. Remove the 5/16" screw that holds the bracket to the cabinet. Lift the bracket and valve up slightly and pivot to the nearest side of the washer.

Loosen the clamp and remove the outlet hose from the valve. Some water will come out; catch in the pan. Note wire colors on the valve terminals and remove the wires. Remove two 5/16" screws holding the valve to the bracket.

## INSTALLATION

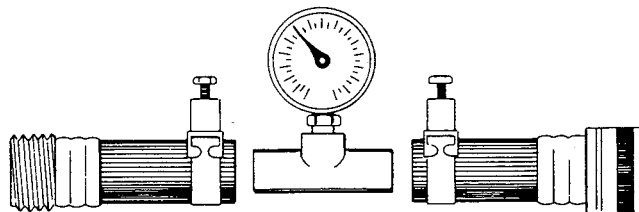
Mount the new valve to the bracket with two 5/16" screws. One white wire will go to each electrical solenoid with a red or orange wire going to the hot water side of the valve. The remaining wire will be attached to the cold water solenoid. Reinstall the hose and clamp on the outlet of the valve. Now pivot the valve and bracket back into position. Reinstall the 5/16" screw in the top of the bracket. Reinstall the hot water hose to the side marked with an "H" on the bracket.

The cold water side will be marked with a "C". Turn the water faucets back on and check for leaks at the valve. Slide the washer back into position and plug in the electrical cord. Turn the washer timer to fill, push hot water button and pull timer dial out. Let water run for a short time and then check temperature of the water coming into tub. If the water is hot, then press the cold. If this water is cold, you know that you have the hoses hooked up correctly. If the temperatures are incorrect, simply shut off the water faucets and reverse the fill hoses.

## SLOW FILL

1. Check screens at faucet.
2. Check screens at water valve.
3. Check water pressure. The water pressure should be between 30 p.s.i. and 120 p.s.i.

### Water Pressure Gauge



A flow-pressure tester can be made up easily using locally available fittings and water pressure gauge.

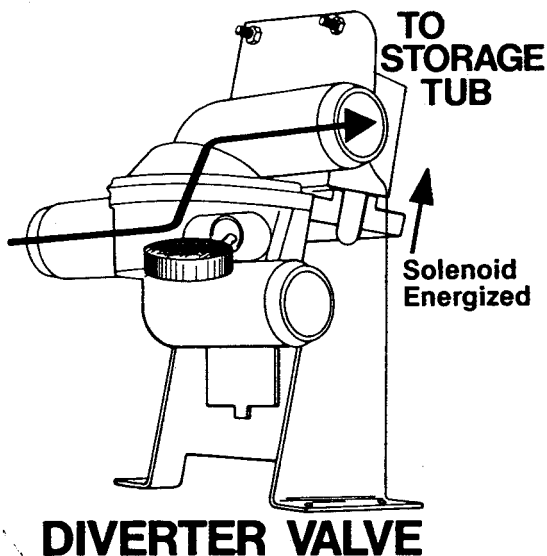
**Static pressure:** Pressure when valve is closed.

**Dynamic pressure:** Pressure when valve is open and water is flowing. If this pressure is below 20 lbs. p.s.i., valve in washer may not close properly. If pressure is above 80 lbs. p.s.i., water line "hammer" is probable.

## DIVERTER VALVE - SUDS-SAVE MODELS

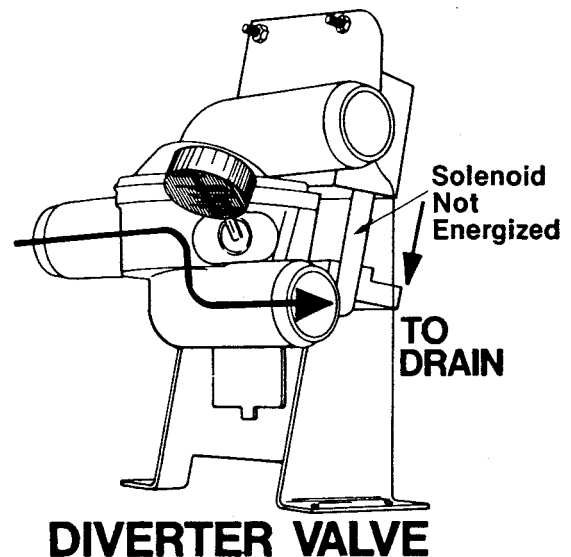
### SUDS-SAVE

If the "Suds-Save" button is depressed, the diverter valve solenoid will be energized in the first spin cycle and the wash water will be forced in a direction as indicated below. Since the diverter valve solenoid is energized, discharge water will be forced into the storage tank.



After two minutes has elapsed and during the rest of the first spin, the electrical circuit to the diverter solenoid is opened.

During the flush rinse portion of the spin and damp dry cycle, the diverter valve is in the position shown in the following drawing and all rinse water is directed to the drain.



**NOTE:** It is important to tell the customer that it is not possible to save suds when the Permanent Press cycle is used.

The Suds-Save feature was not incorporated into the Permanent Press cycle primarily because of the cool-down period. The cool-down period consists of two partial drain periods and a refill with cold water after each partial drain. If water from the two partial drains was pumped into the storage tank plus the full tub of water after the wash cycle, the storage tank would overflow.

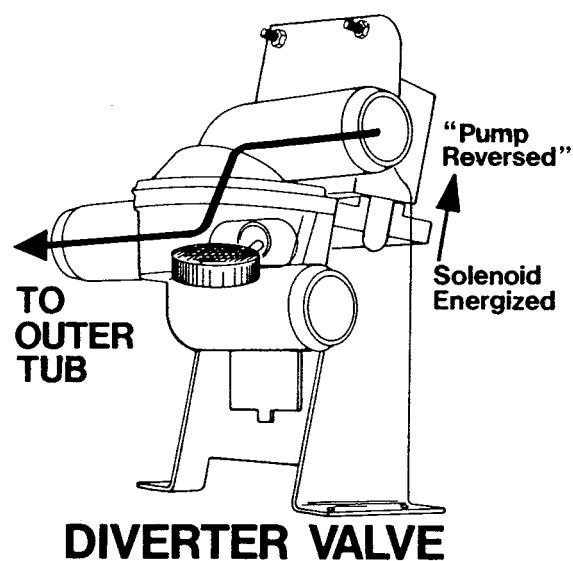
### SUDS RETURN

Assuming the wash water has been saved, there must be a suitable method of returning it to the washer for reuse when needed.

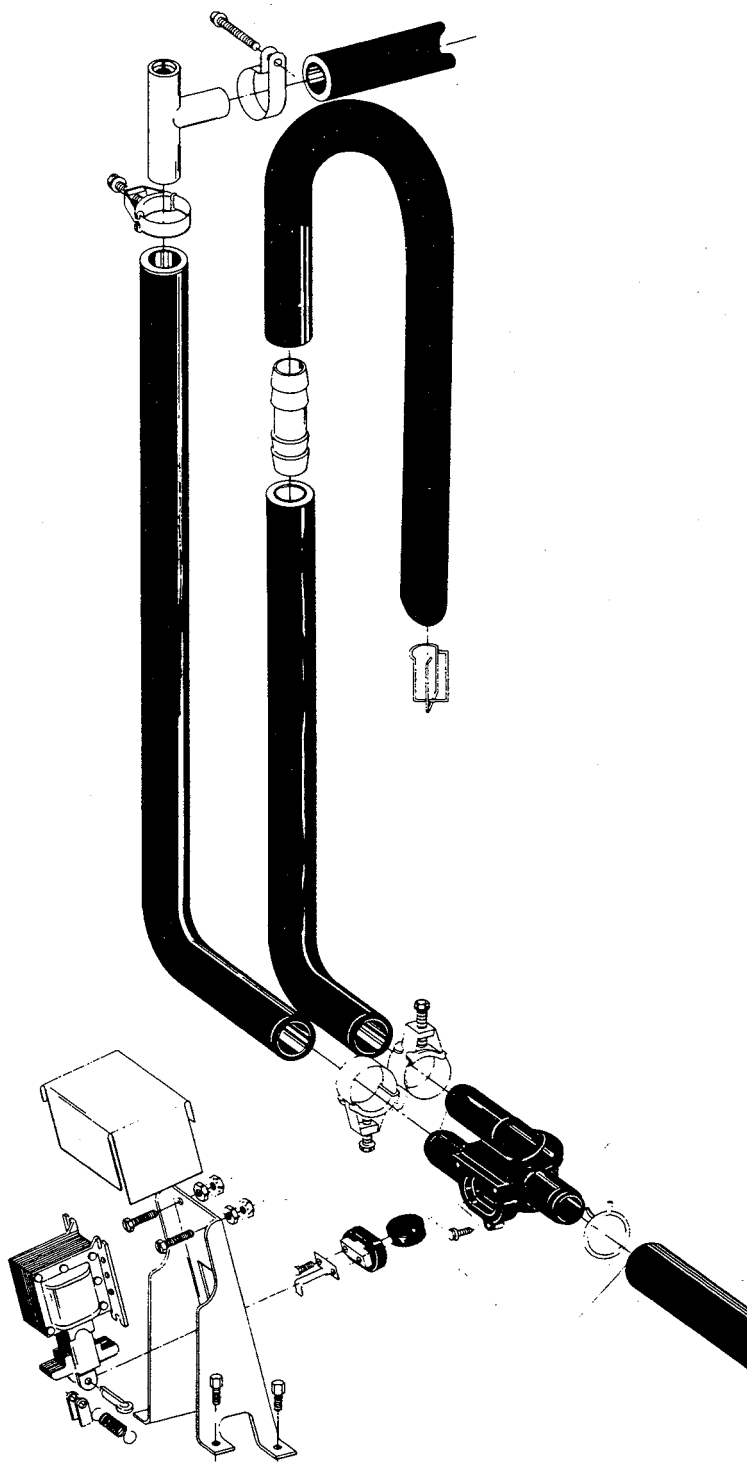
### To return the stored water:

1. Depress the "Suds-Save" switch on the control panel.
2. Set the timer dial to "Suds Return" and pull the dial out.

The diverter valve solenoid is energized which opens the passage from the storage tub and closes the passage to the drain. When the motor starts, the pump impeller is set in motion and the water entering the pump from the storage tub is forced into the washer. Since the washer is agitating as it fills, the operator should wait until filling is complete before putting clothes in.



**NOTE:** After the suds are returned the timer will not automatically advance into the wash cycle or add make-up water. The timer must be **manually** advanced into the wash cycle. The timer motor is not energized during Suds Return and if not manually advanced into the wash cycle, the washer will agitate continuously until the timer is advanced.



**SUDS SAVER COMPONENTS**

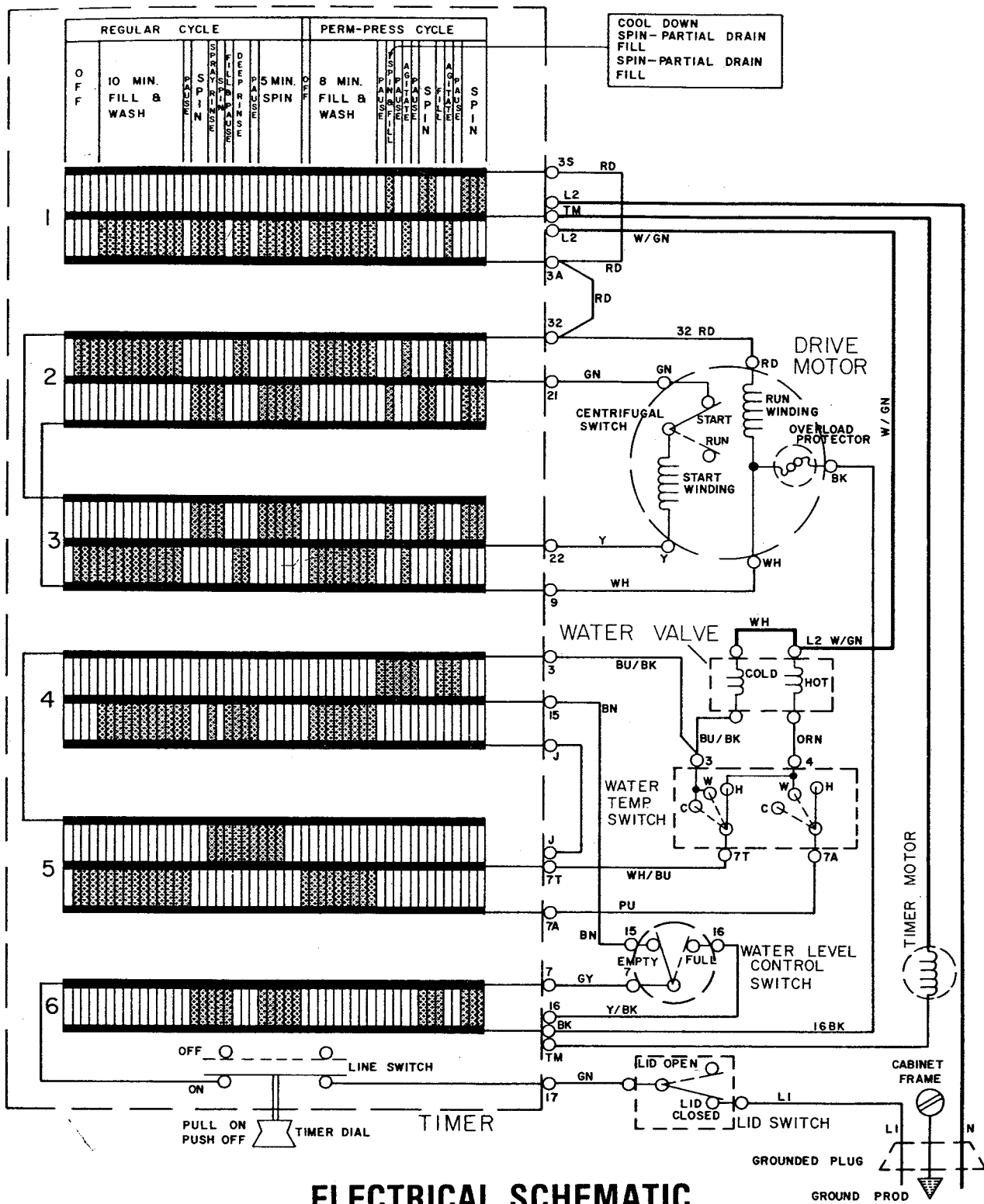


# Section 4

## Schematics

# ELECTRICAL SCHEMATICS AND LADDER DIAGRAMS

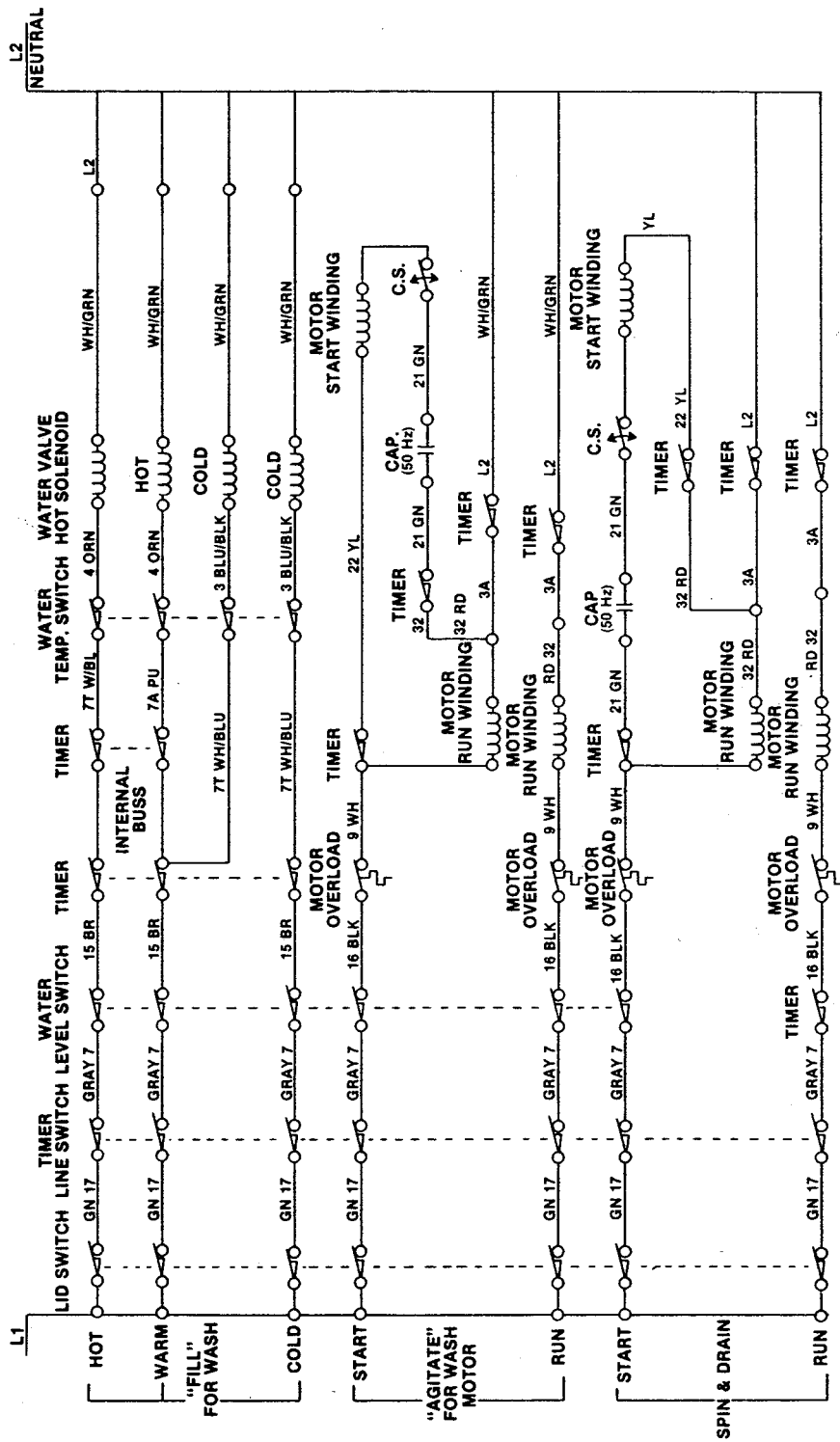




**ELECTRICAL SCHEMATIC  
MODELS A106 - A106F**







C.S. = centrifugal switch

# LADDER DIAGRAM MODELS A107 - A108



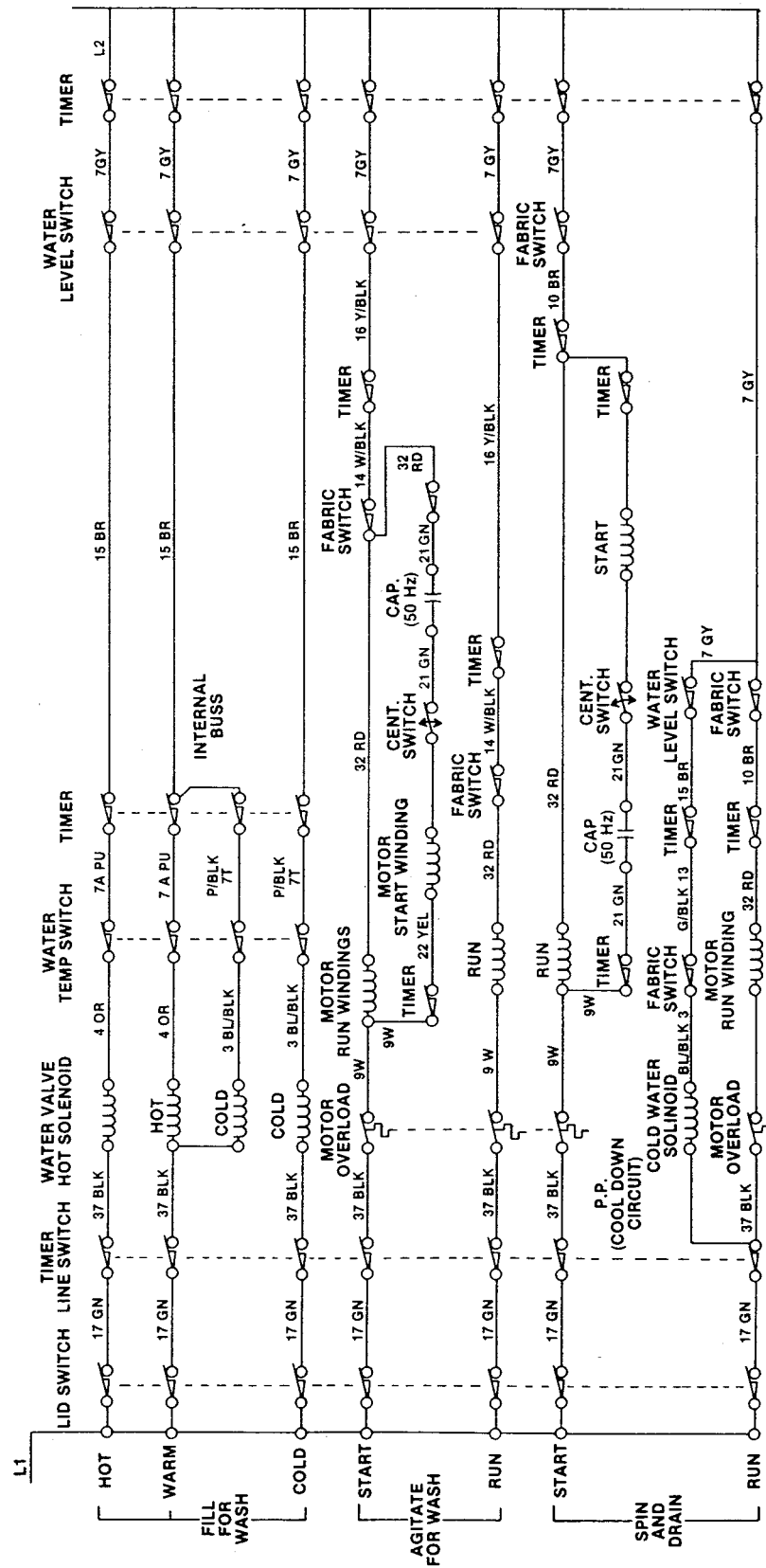






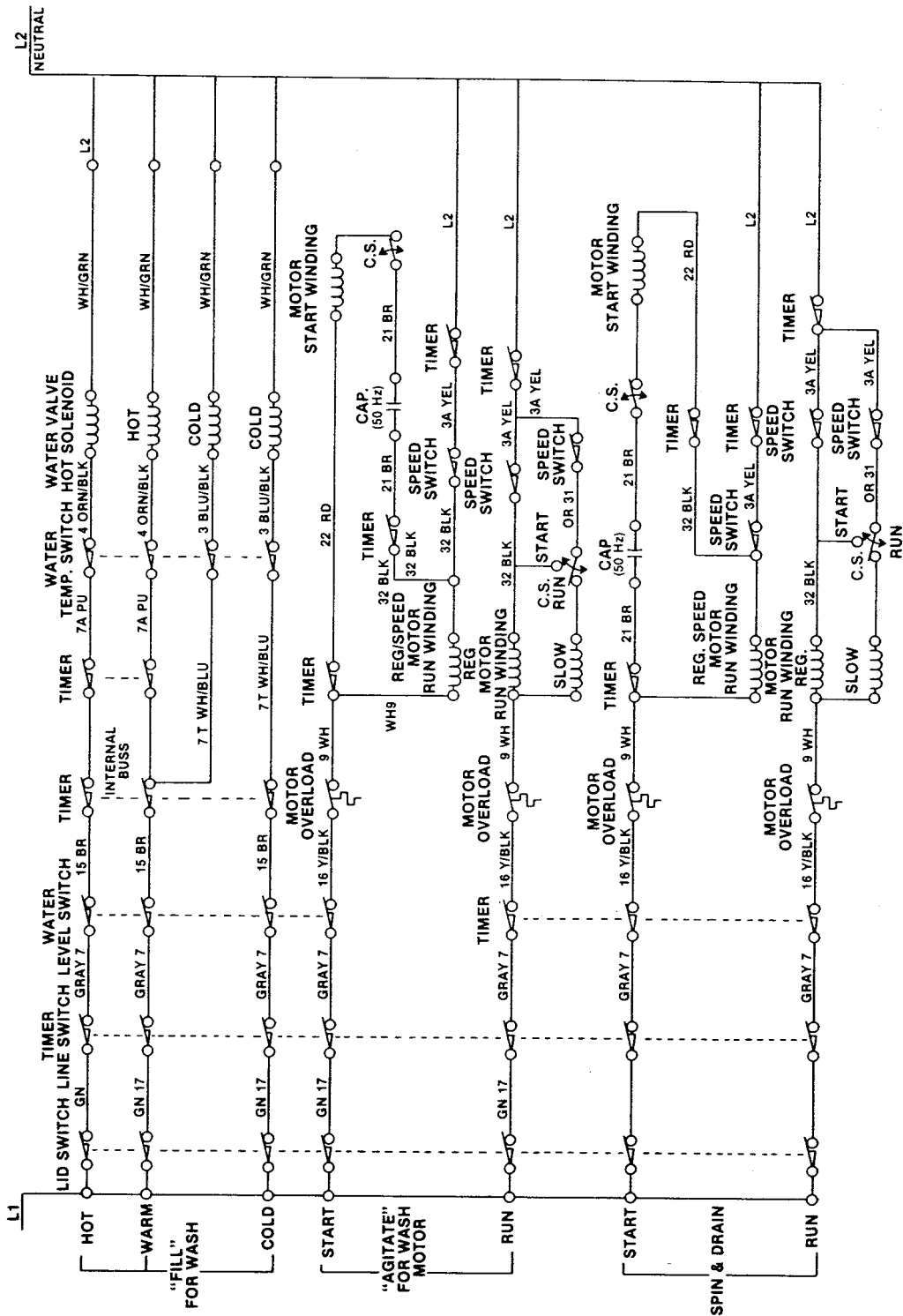






**LADDER DIAGRAM  
MODEL A408**

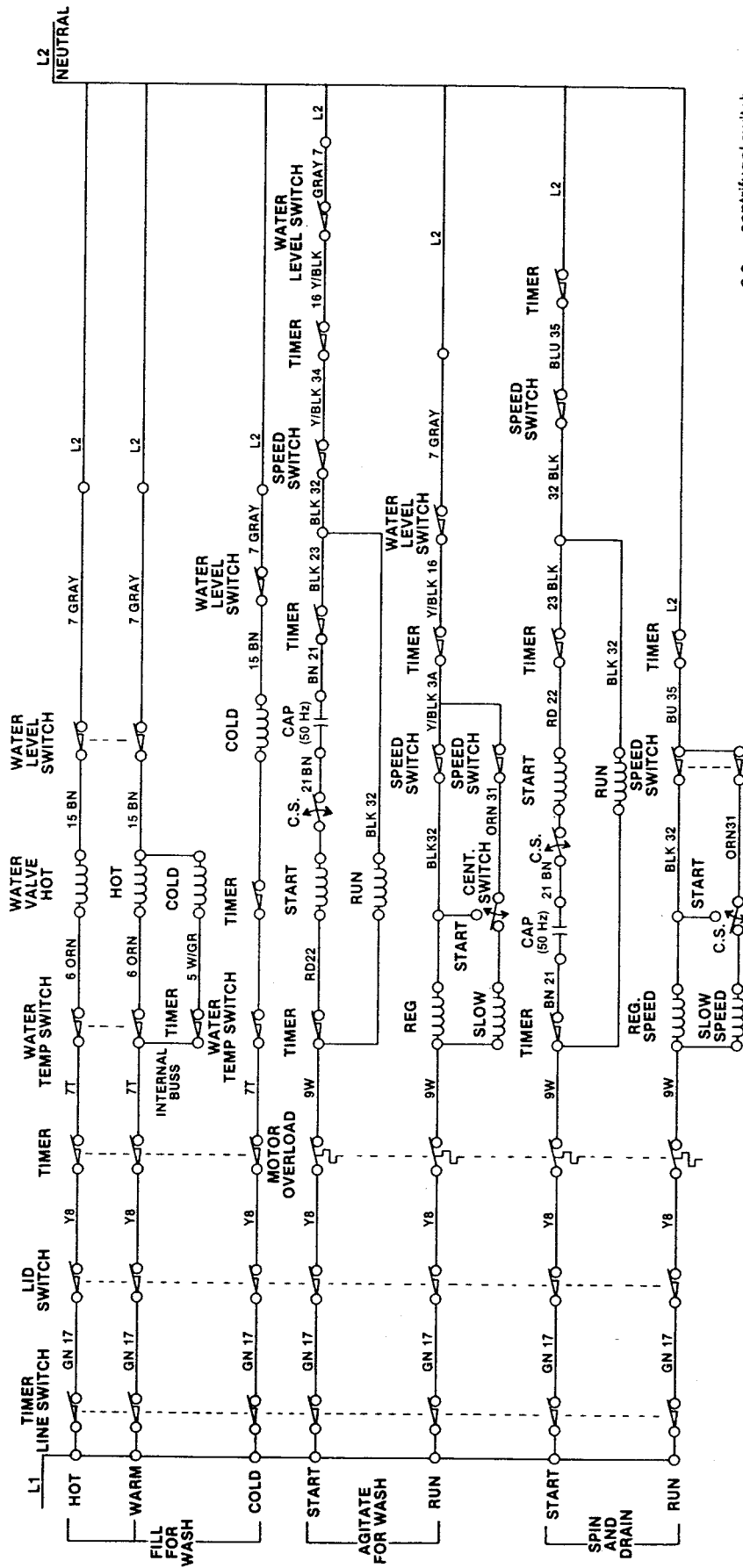




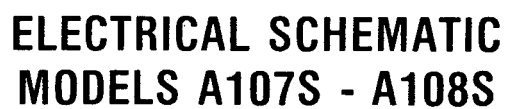
C.S. = centrifugal switch

# LADDER DIAGRAM MODEL A608



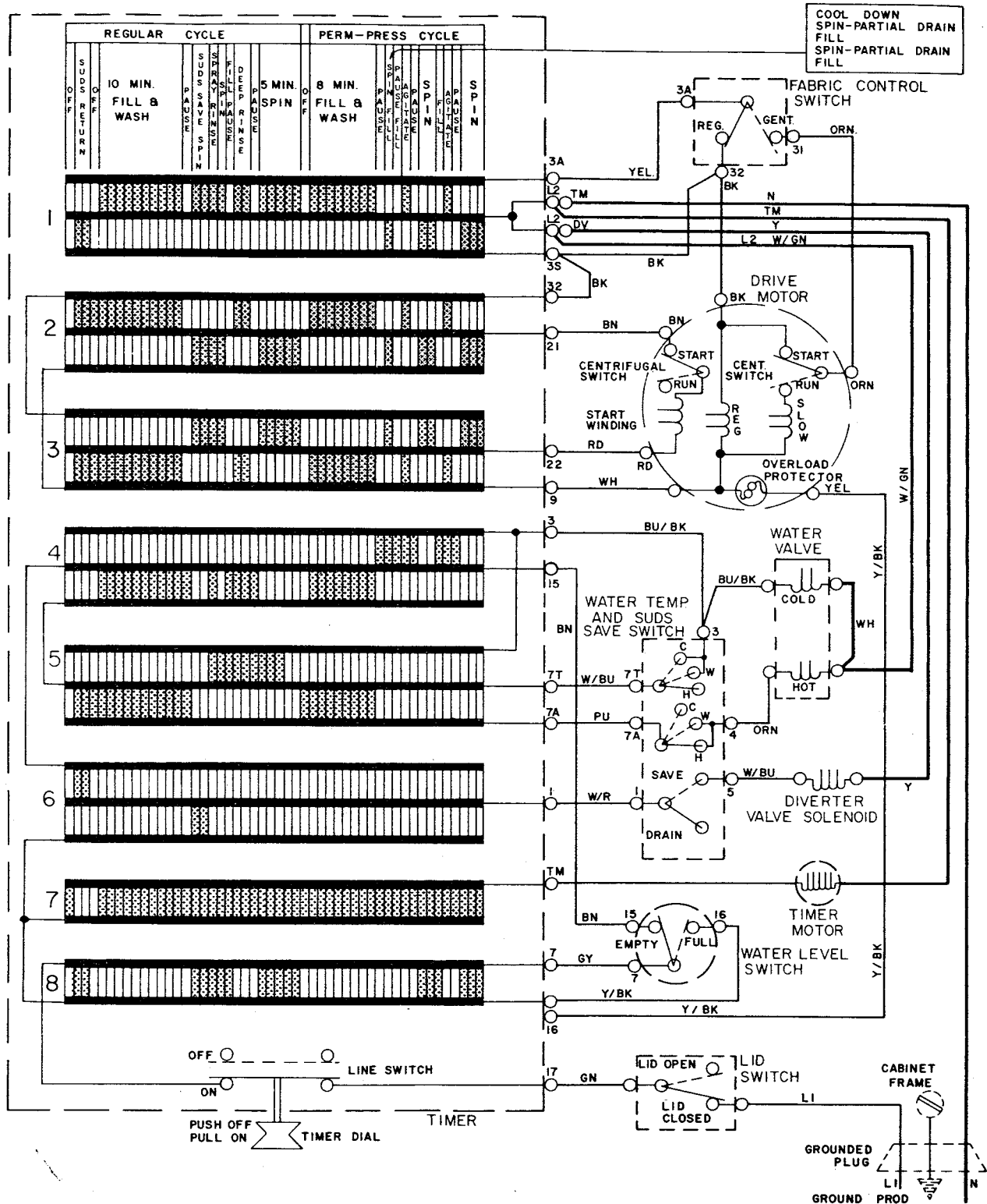


LADDER DIAGRAM  
MODEL A806

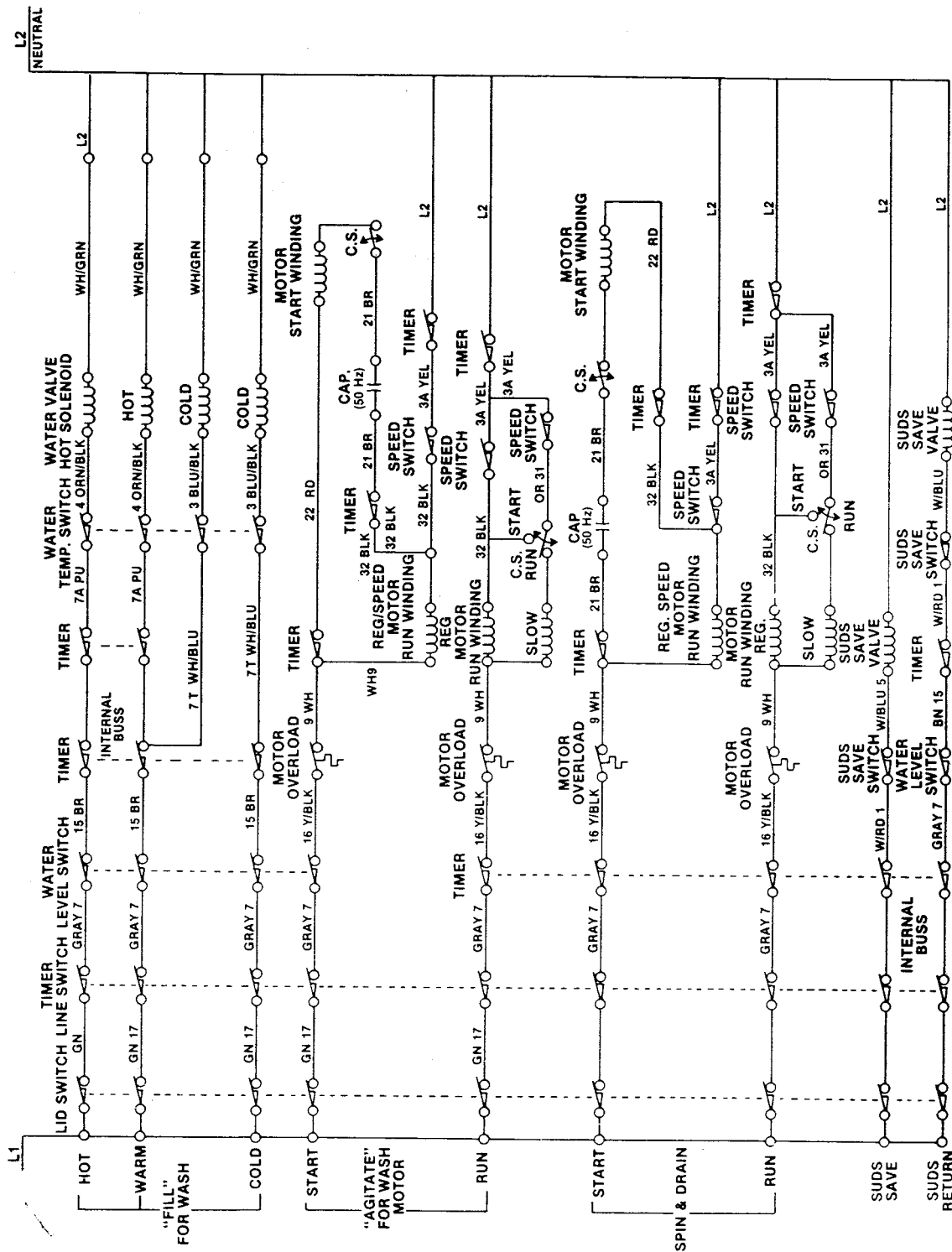






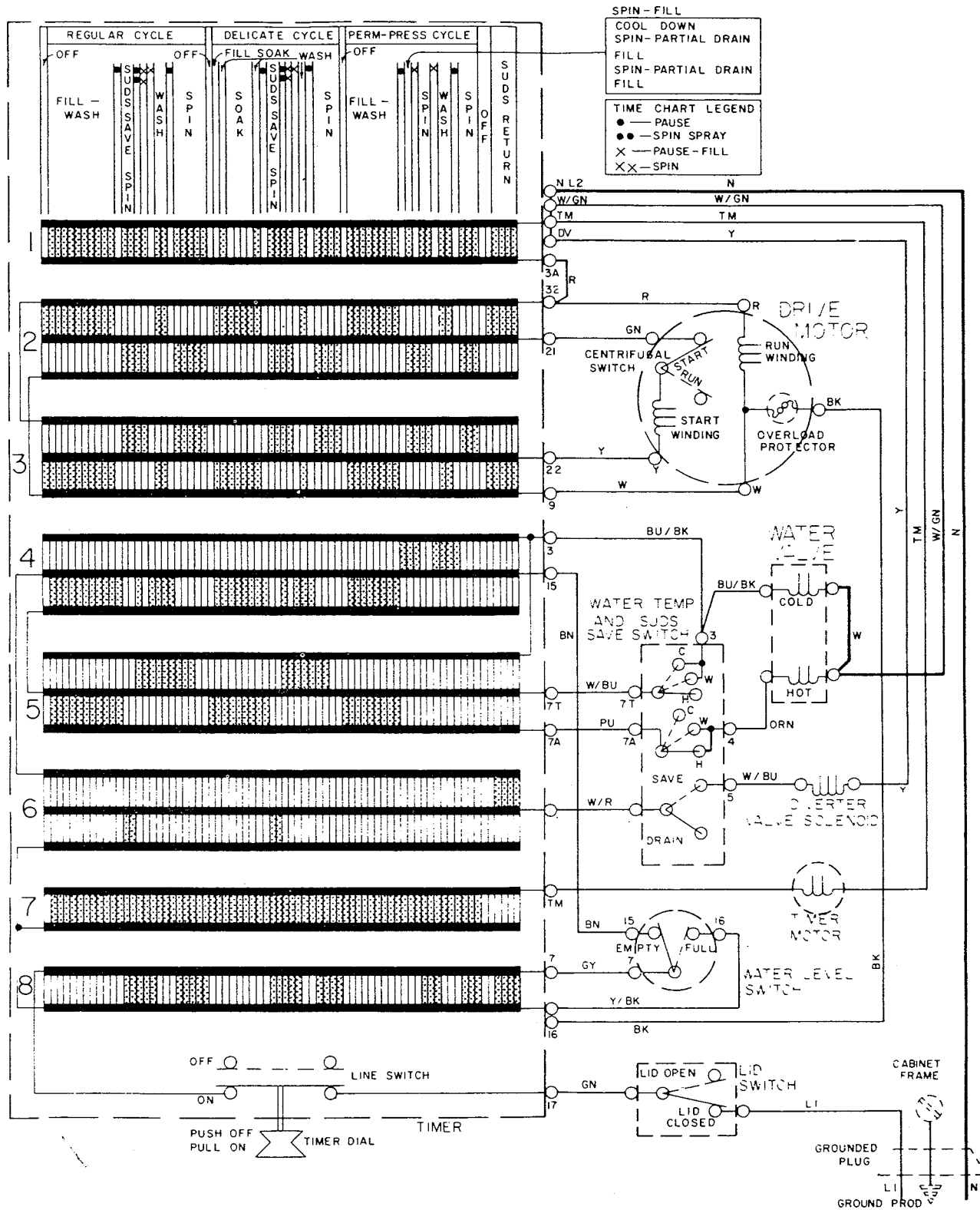


**ELECTRICAL SCHEMATIC  
MODELS A207S - A208S**



c.s. = centrifugal switch

# LADDER DIAGRAM MODELS A207S - A208S



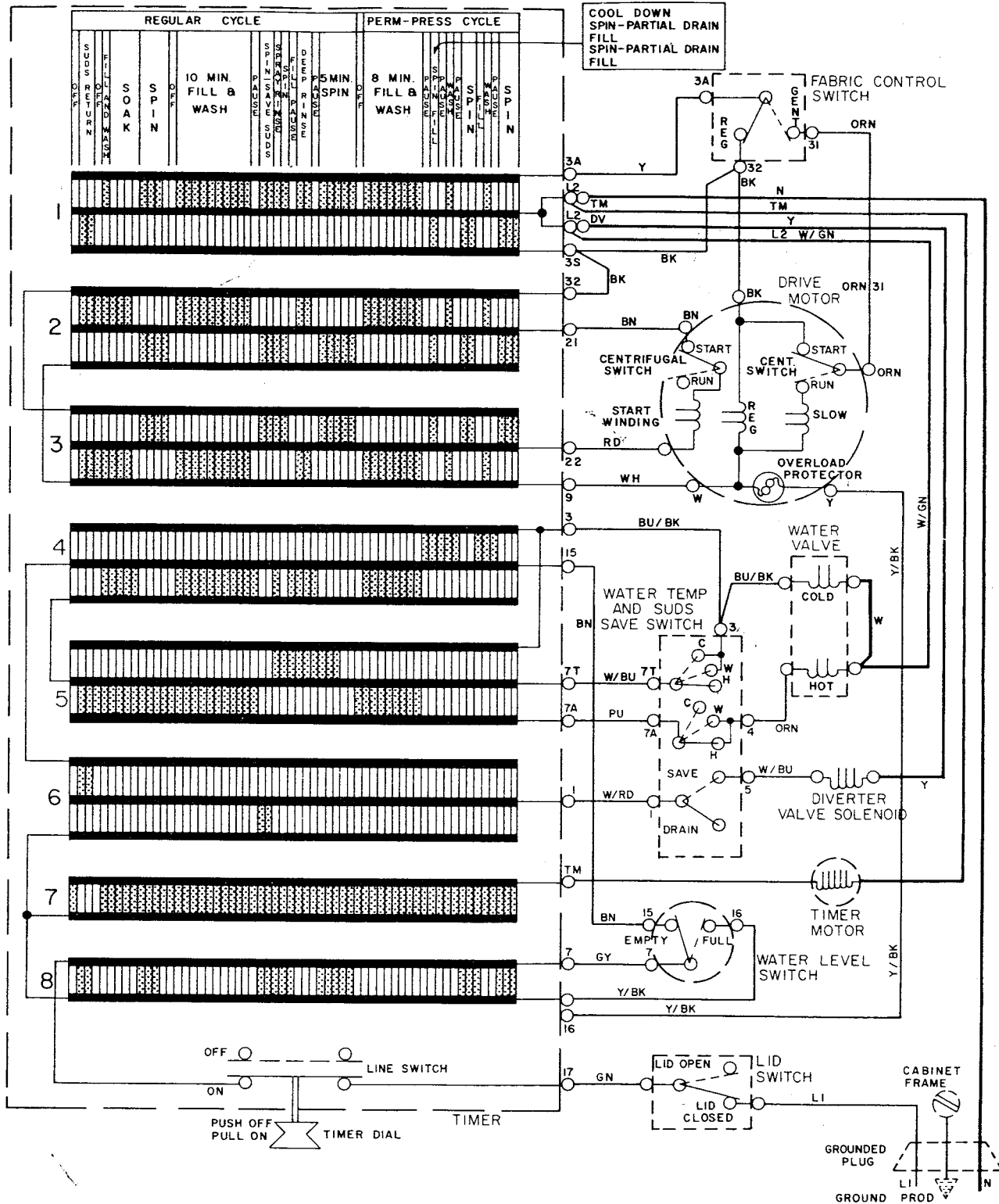
**ELECTRICAL SCHEMATIC  
MODEL A308S**



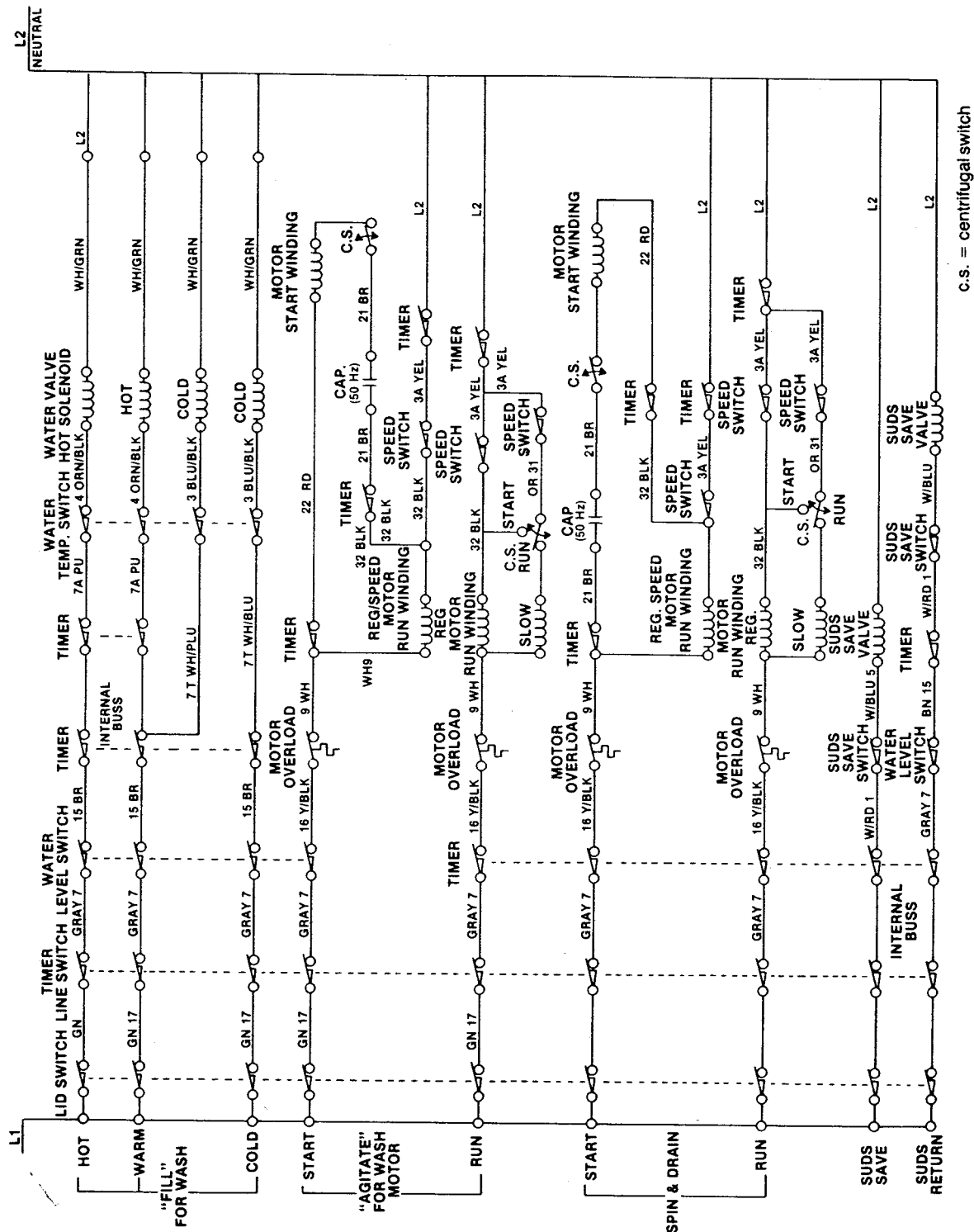
## 4-21







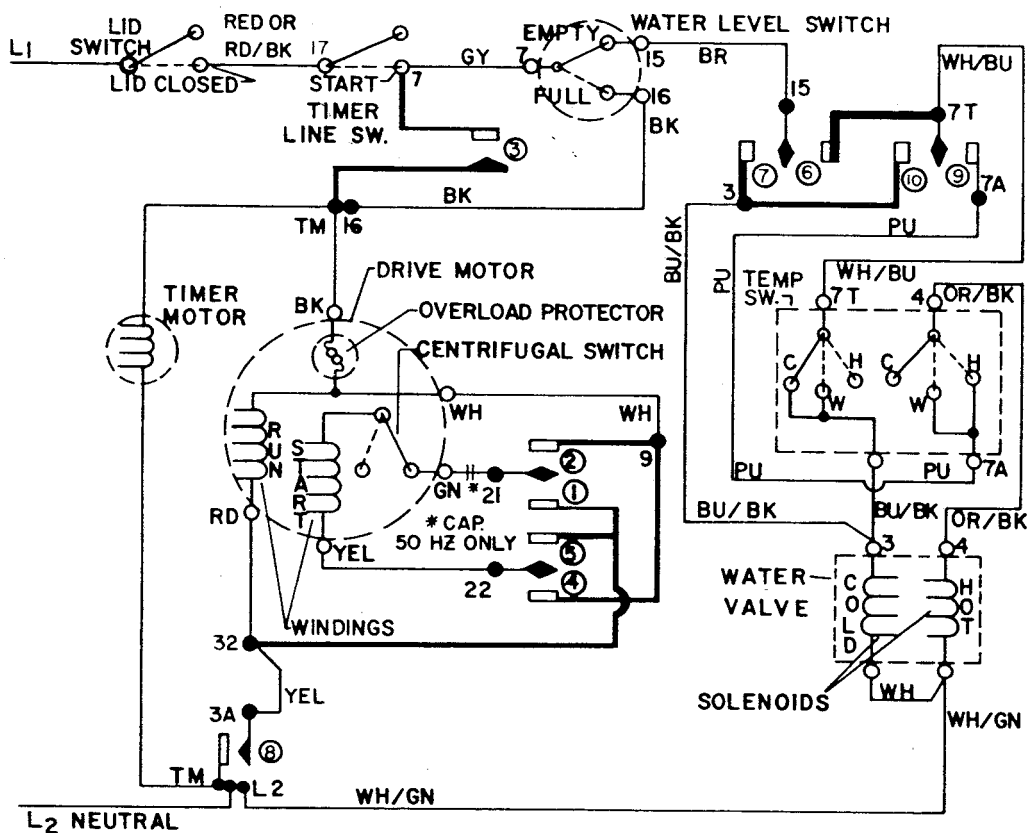
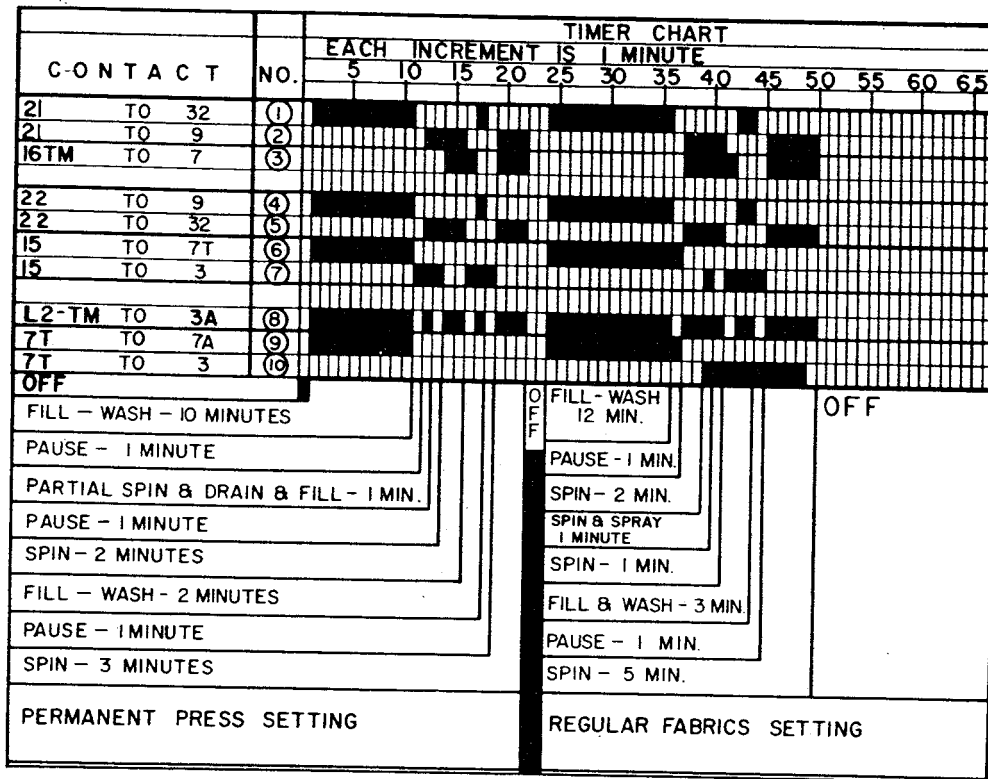
**ELECTRICAL SCHEMATIC  
MODEL A608S**



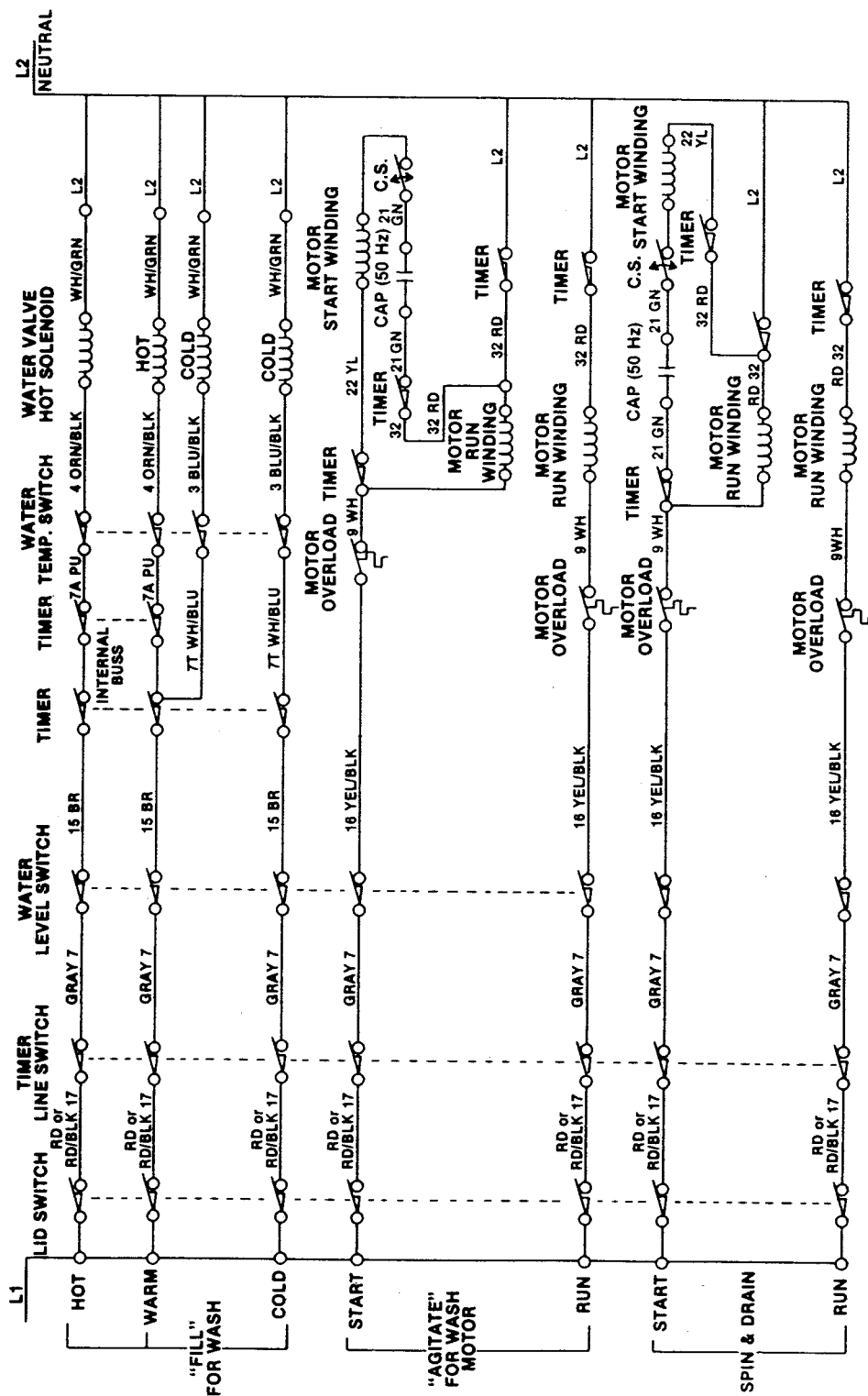
C.S. = centrifugal switch

# LADDER DIAGRAM MODEL A608S





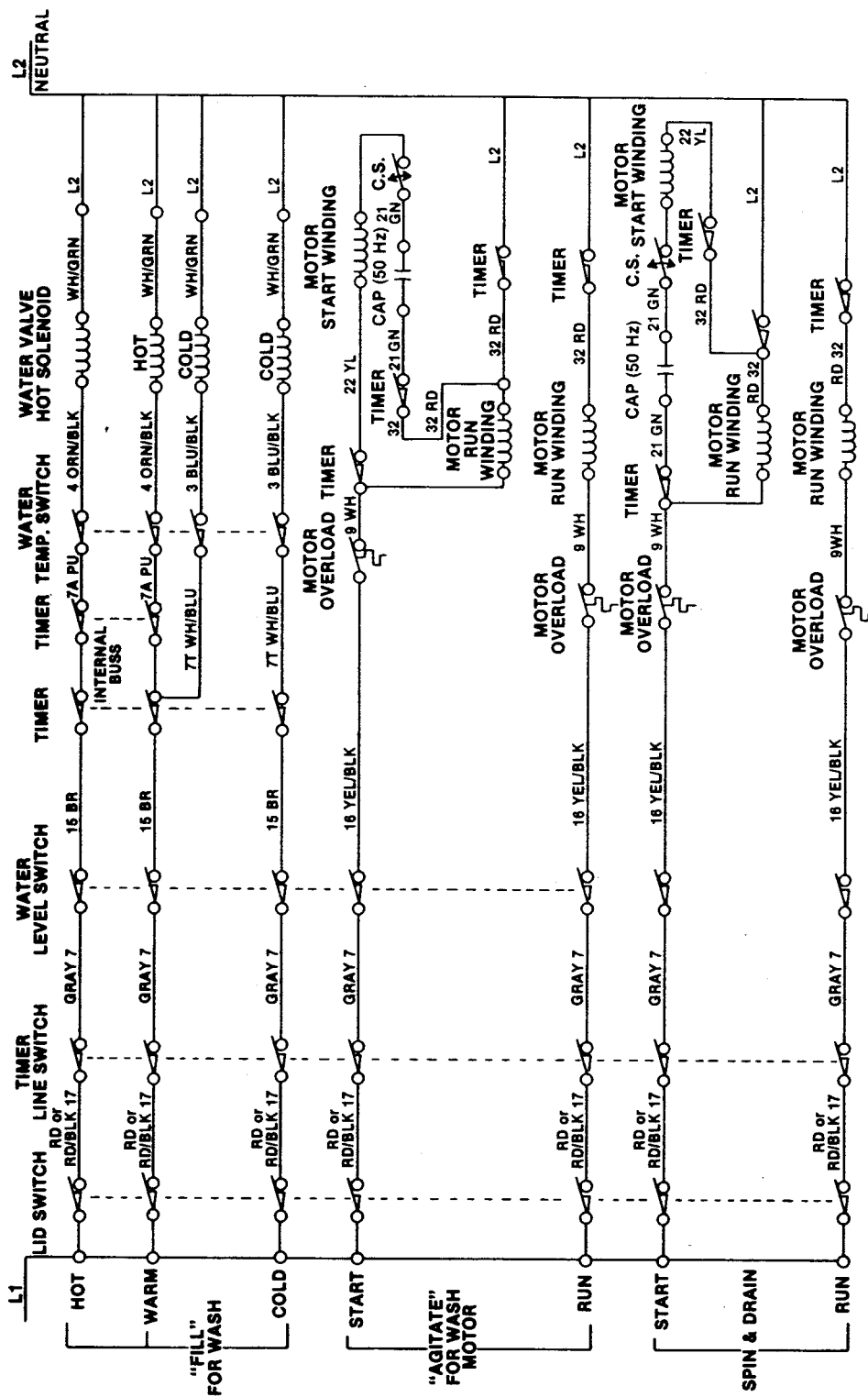
**ELECTRICAL SCHEMATIC  
MODEL A110**



C.S. = centrifugal switch

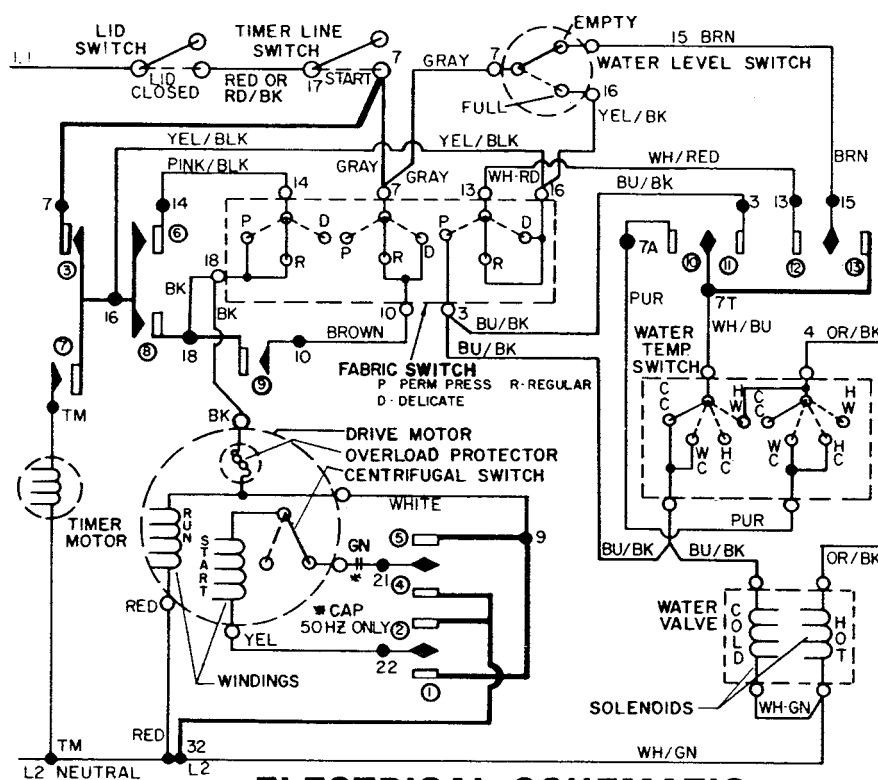
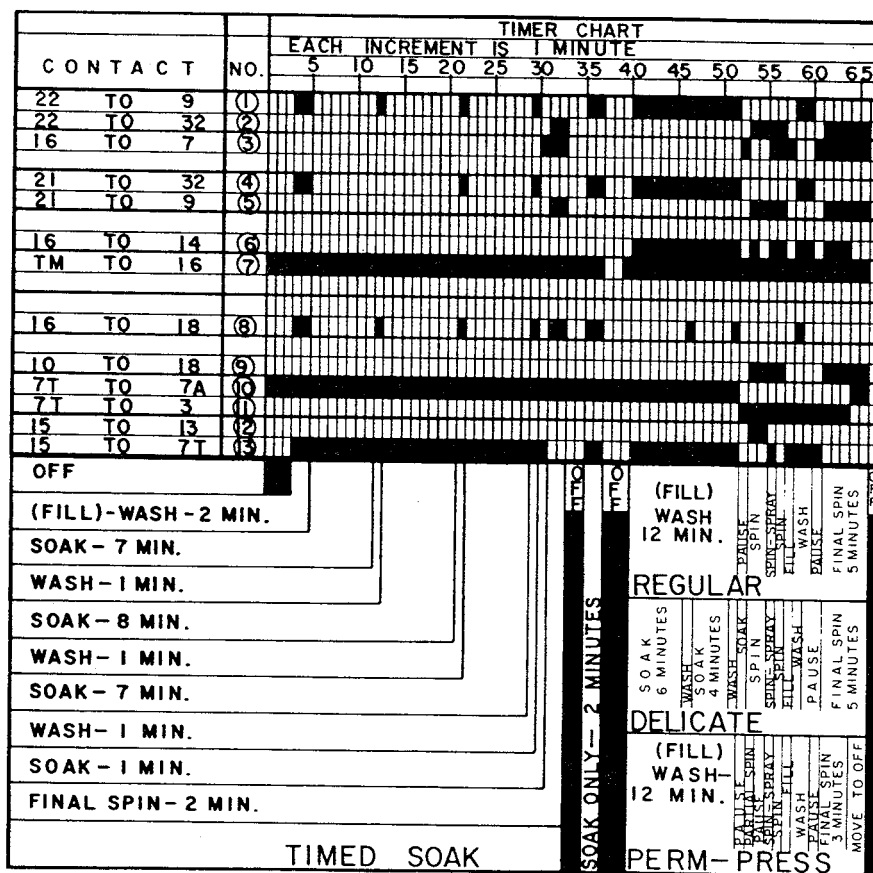
# LADDER DIAGRAM MODEL A110

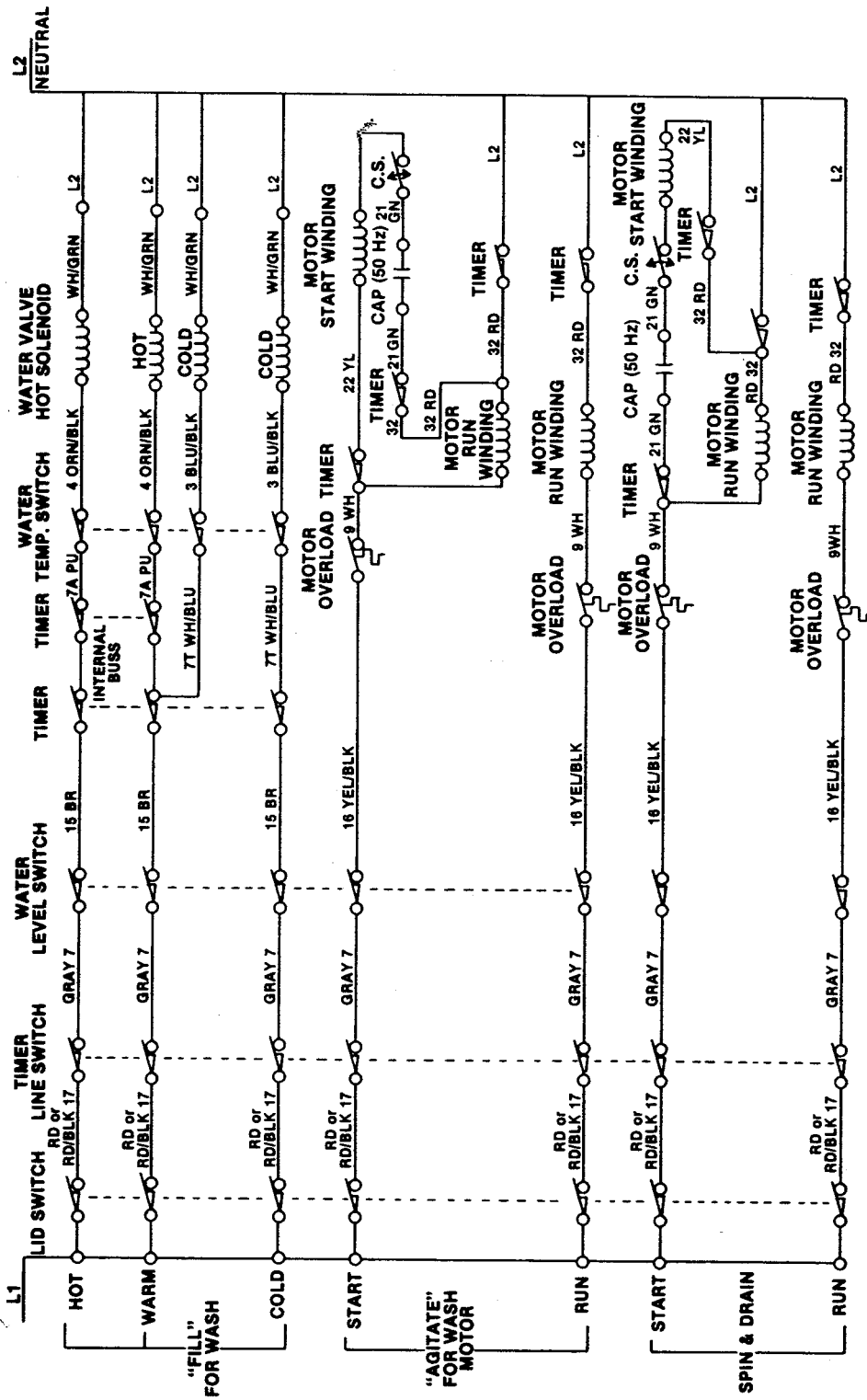




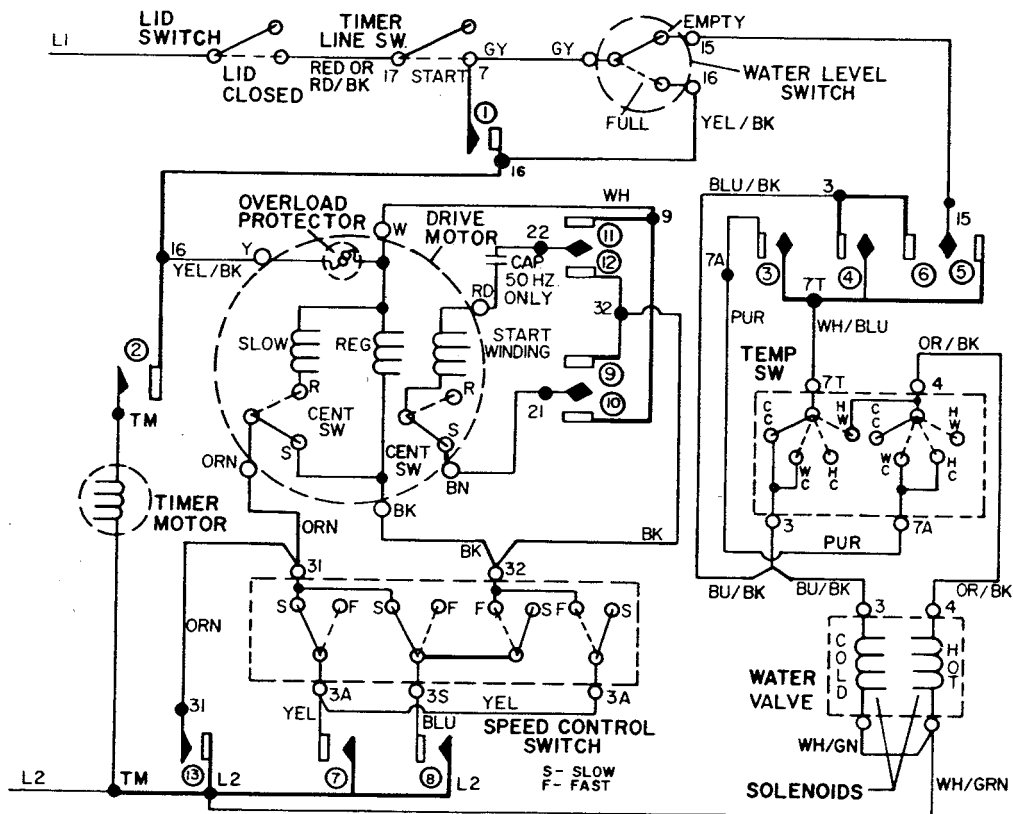
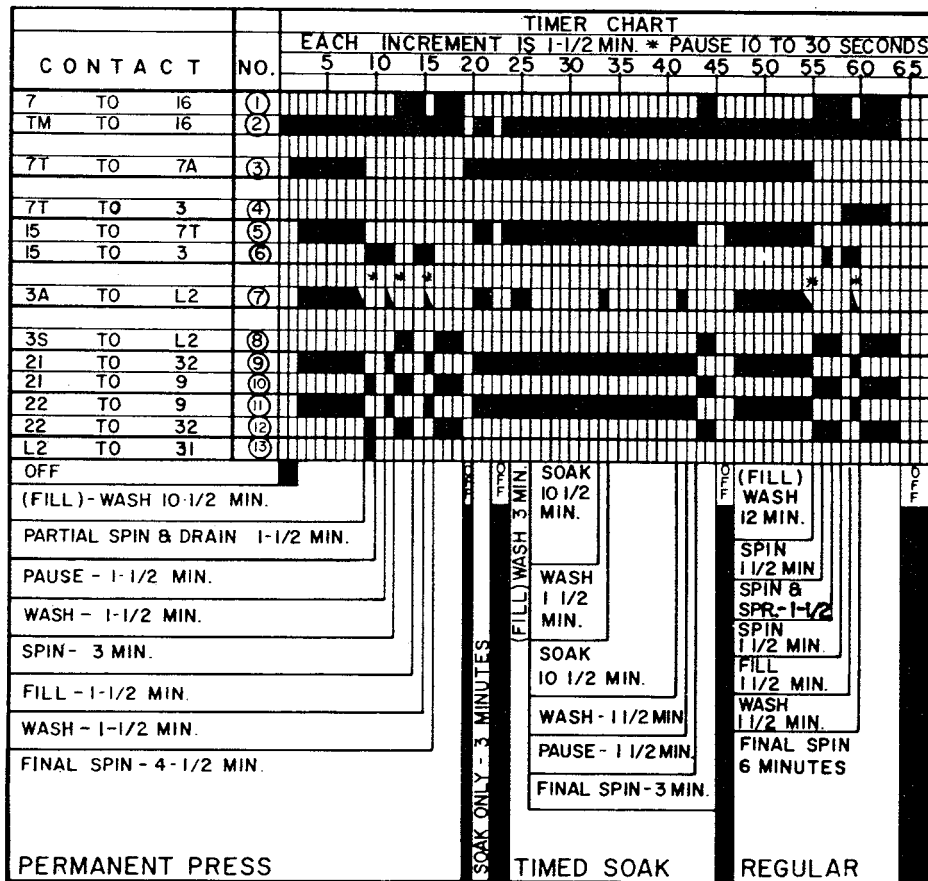
c.s. = centrifugal switch

# LADDER DIAGRAM MODEL A209





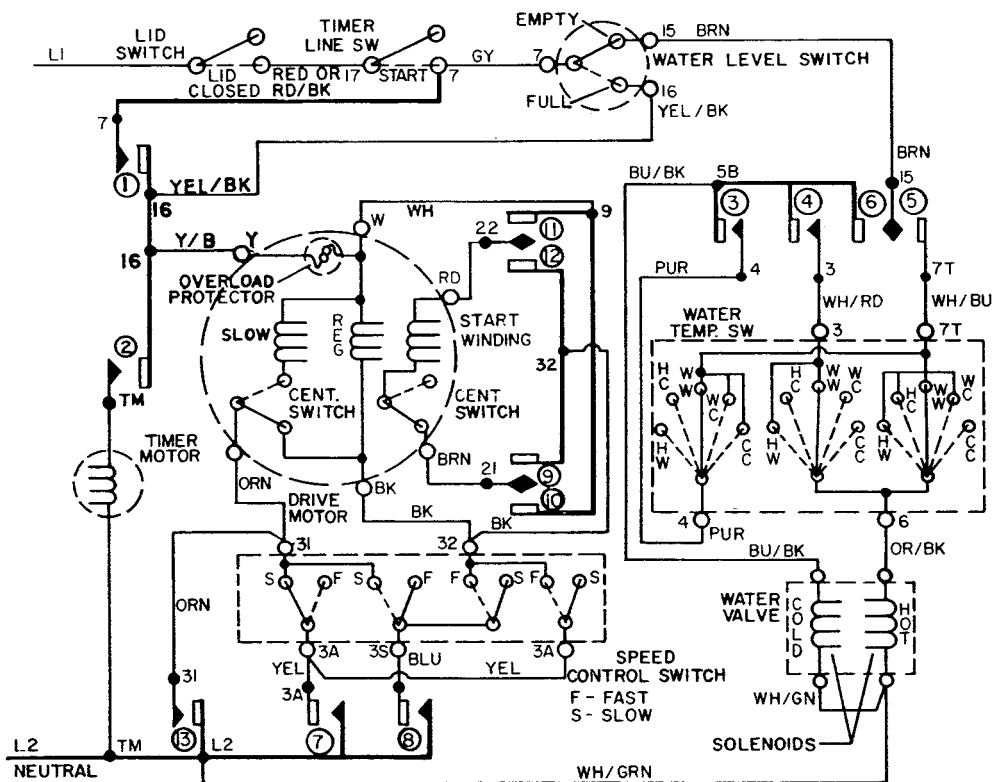
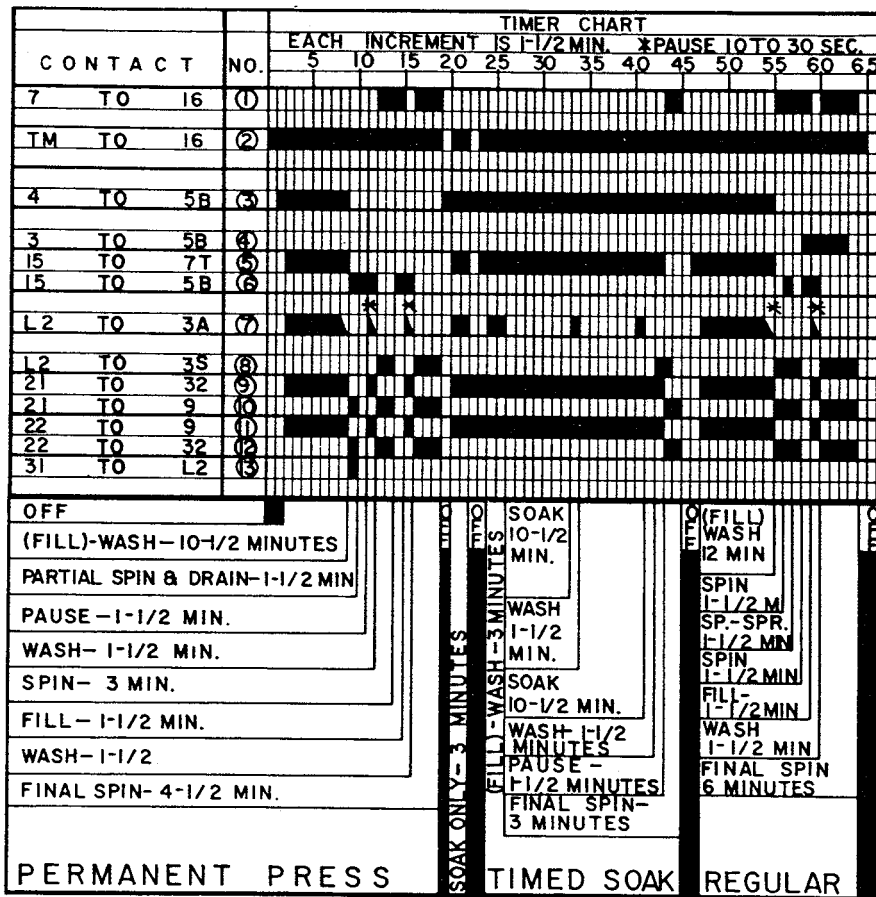
LADDER DIAGRAM  
MODEL A210



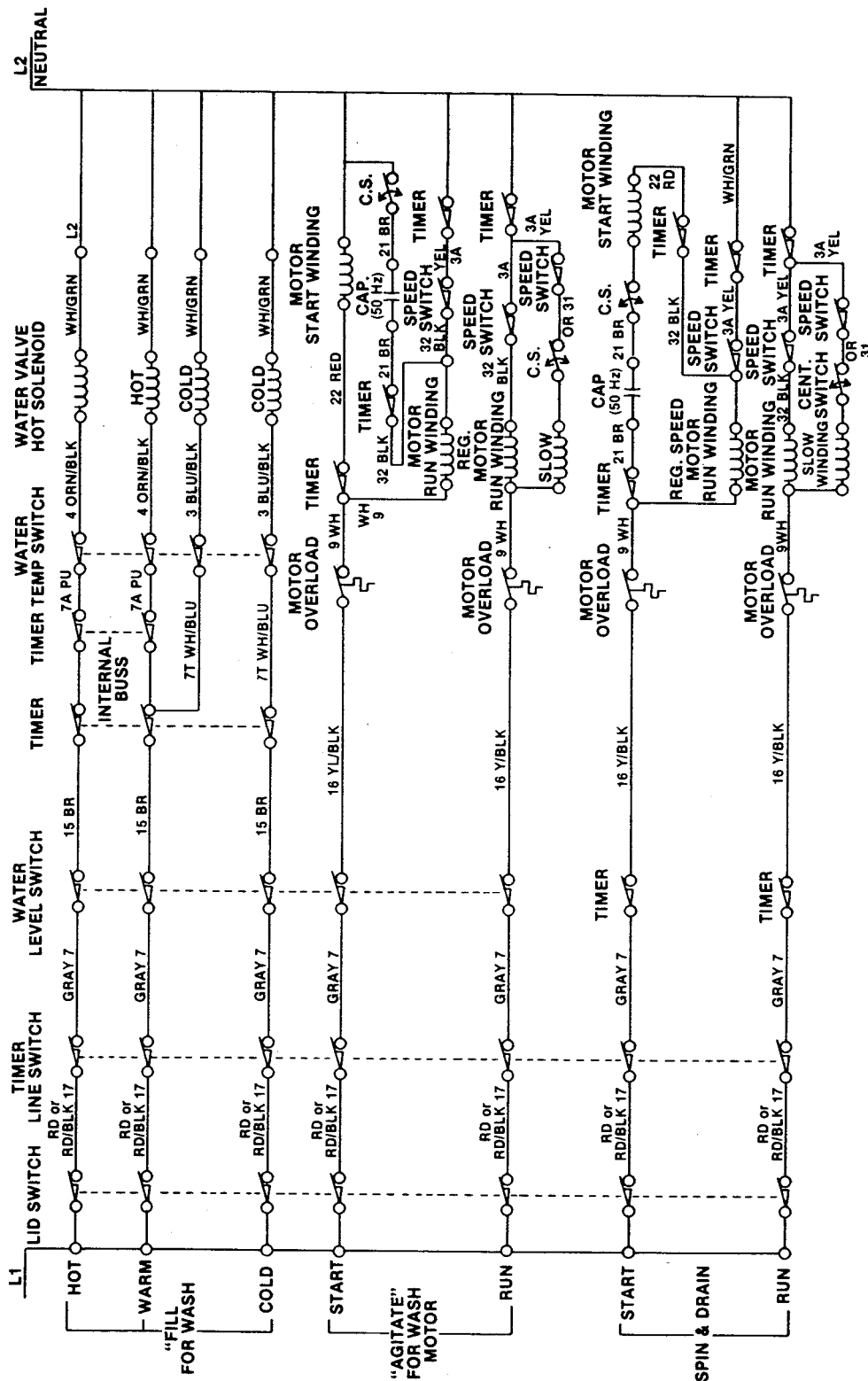
**ELECTRICAL SCHEMATIC  
MODEL A310**







**ELECTRICAL SCHEMATIC  
MODEL A410**

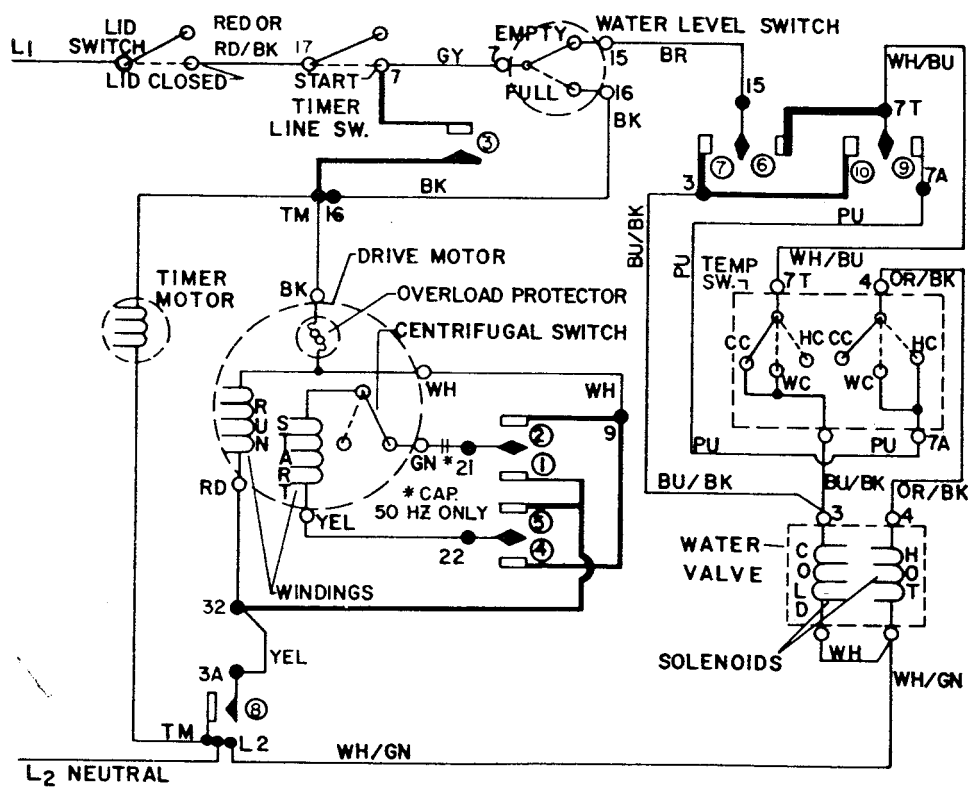


C.S. = centrifugal switch

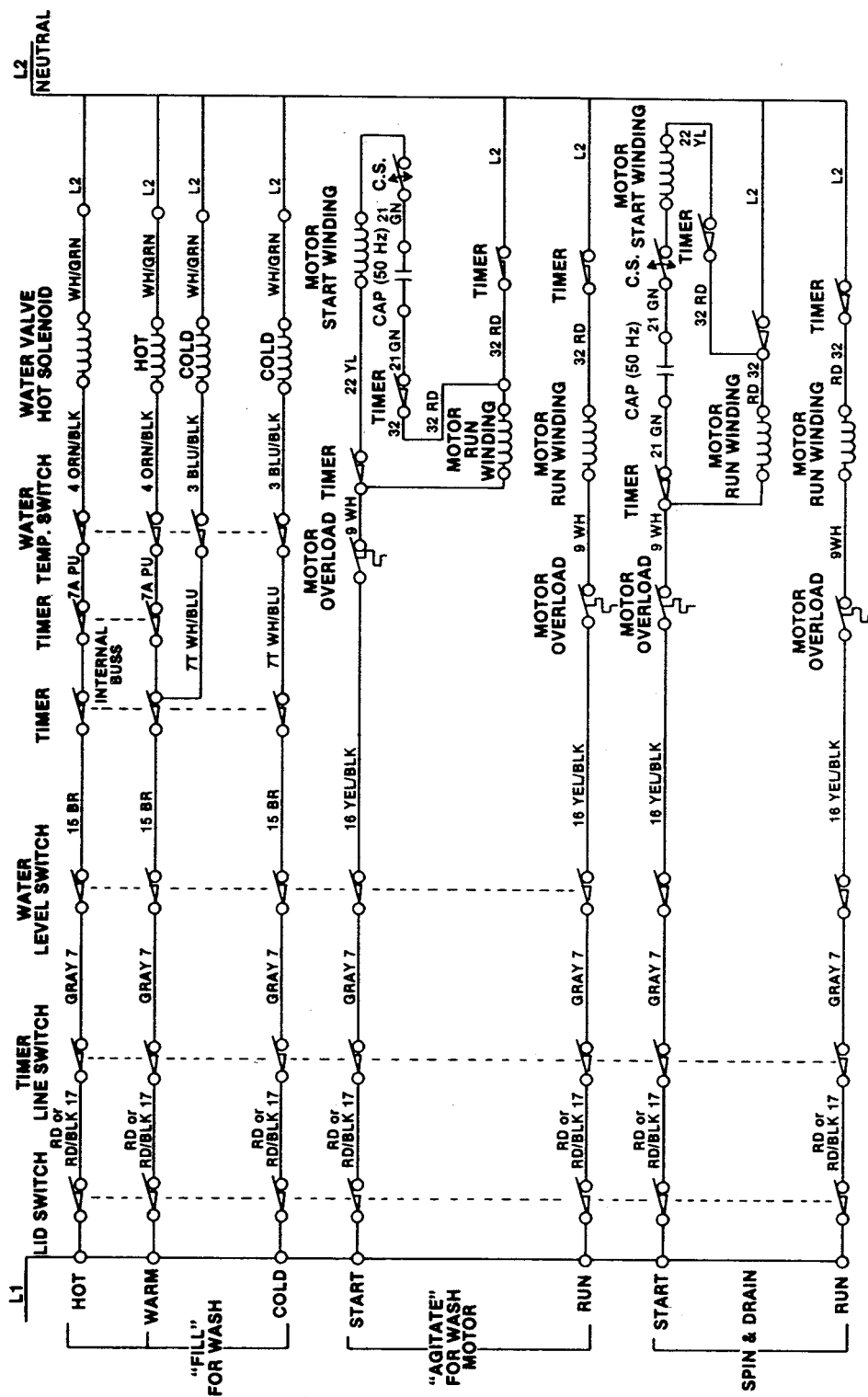
## LADDER DIAGRAM MODEL A 410

[illegible]

ELECTRICAL SCHEMATIC MODEL A503

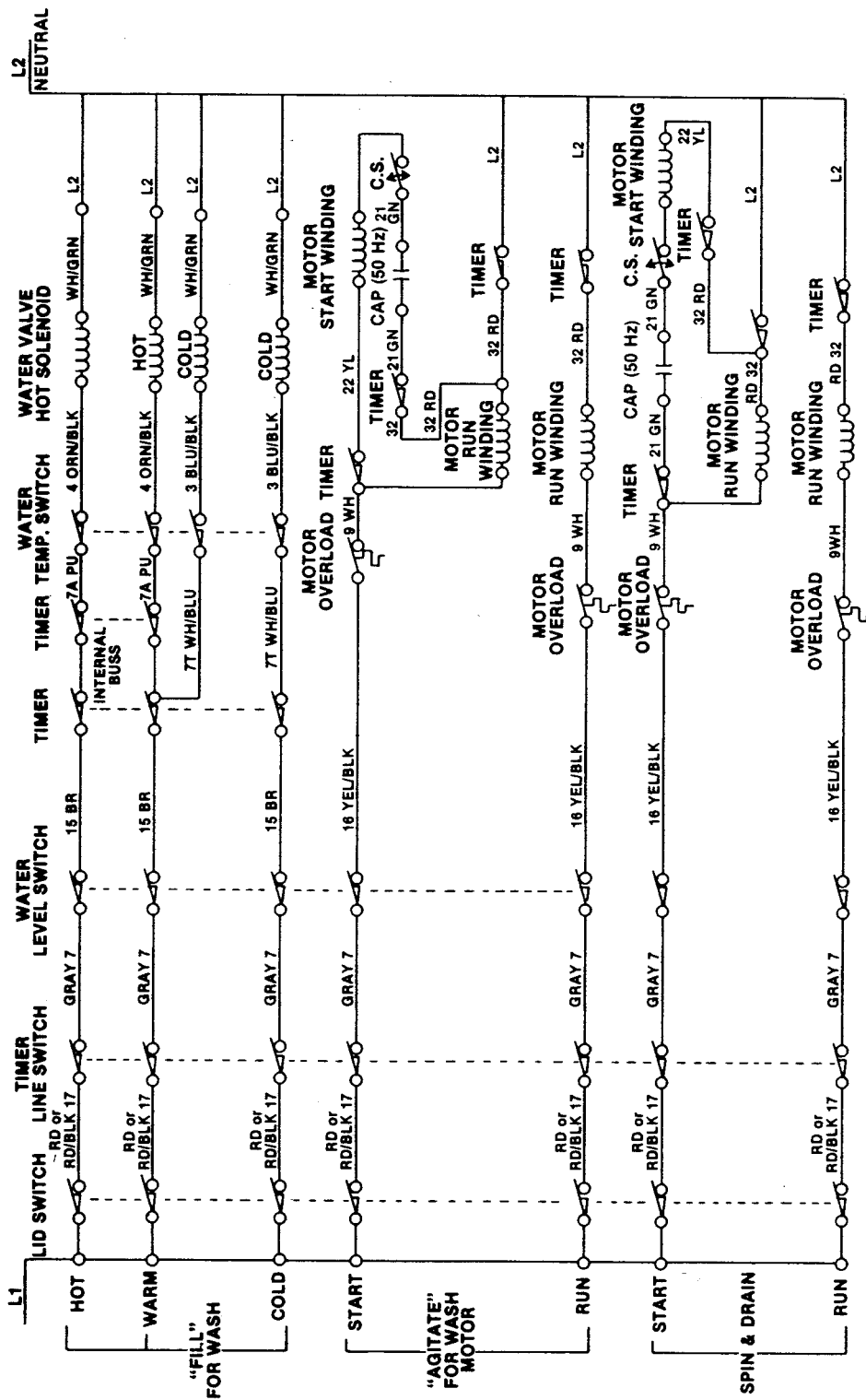


## ELECTRICAL SCHEMATIC – MODEL A503



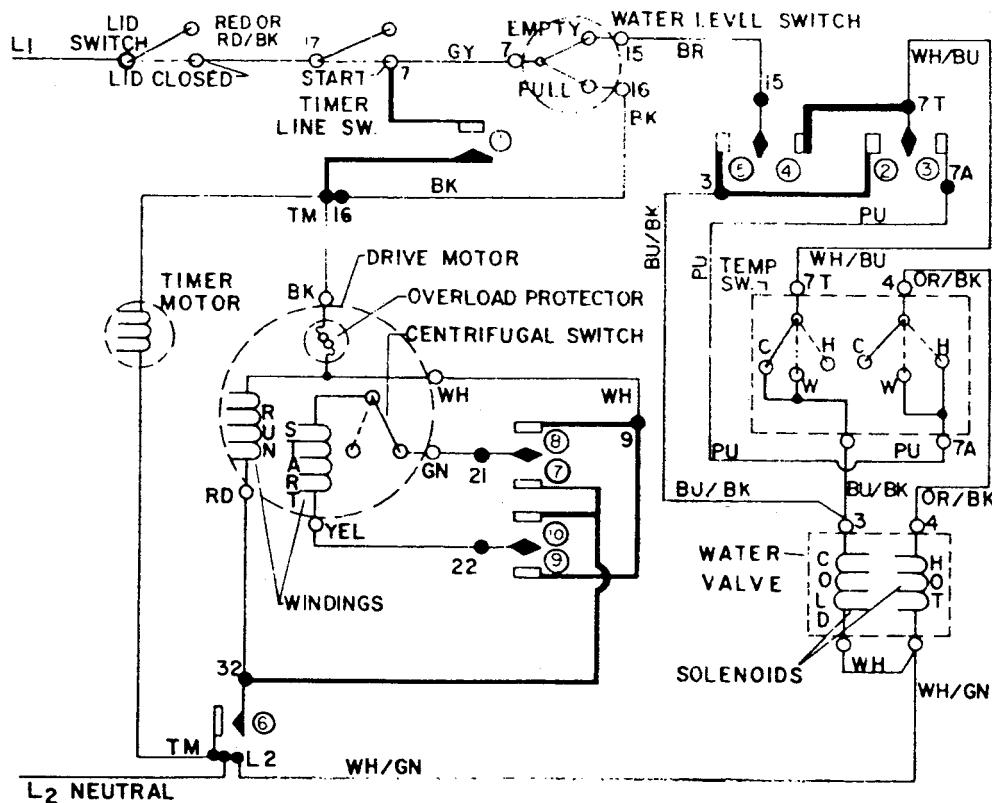
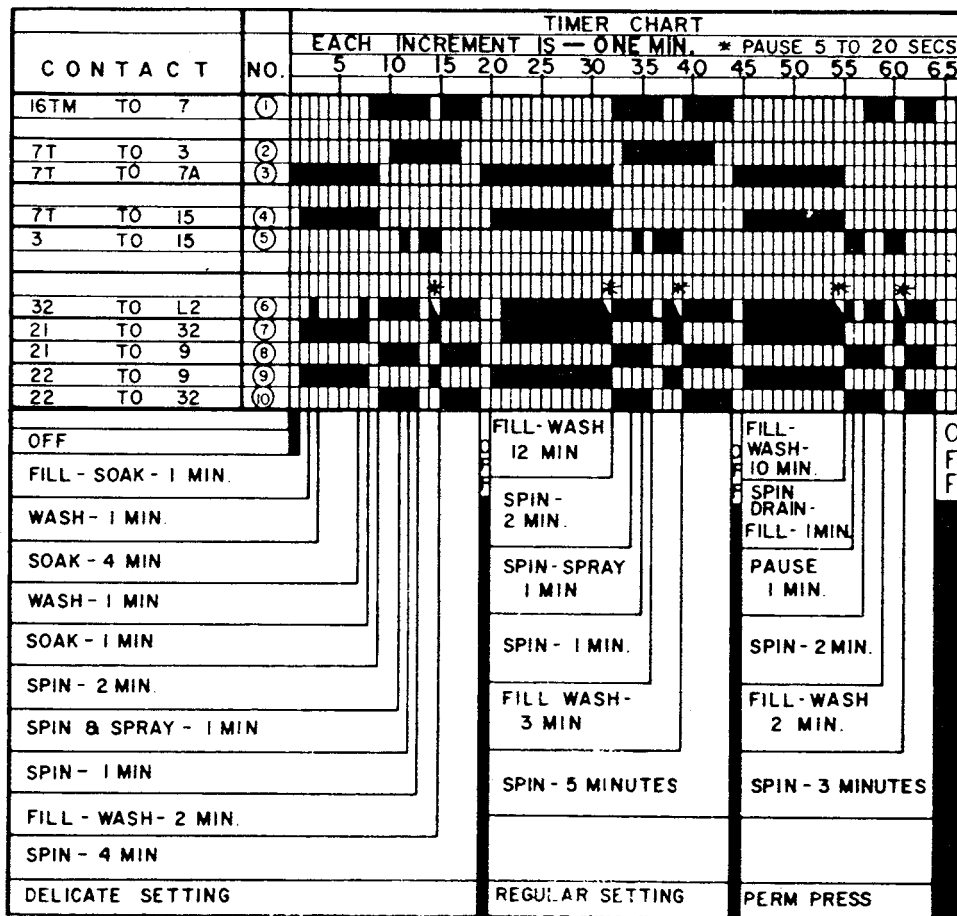
# LADDER DIAGRAM MODEL A503



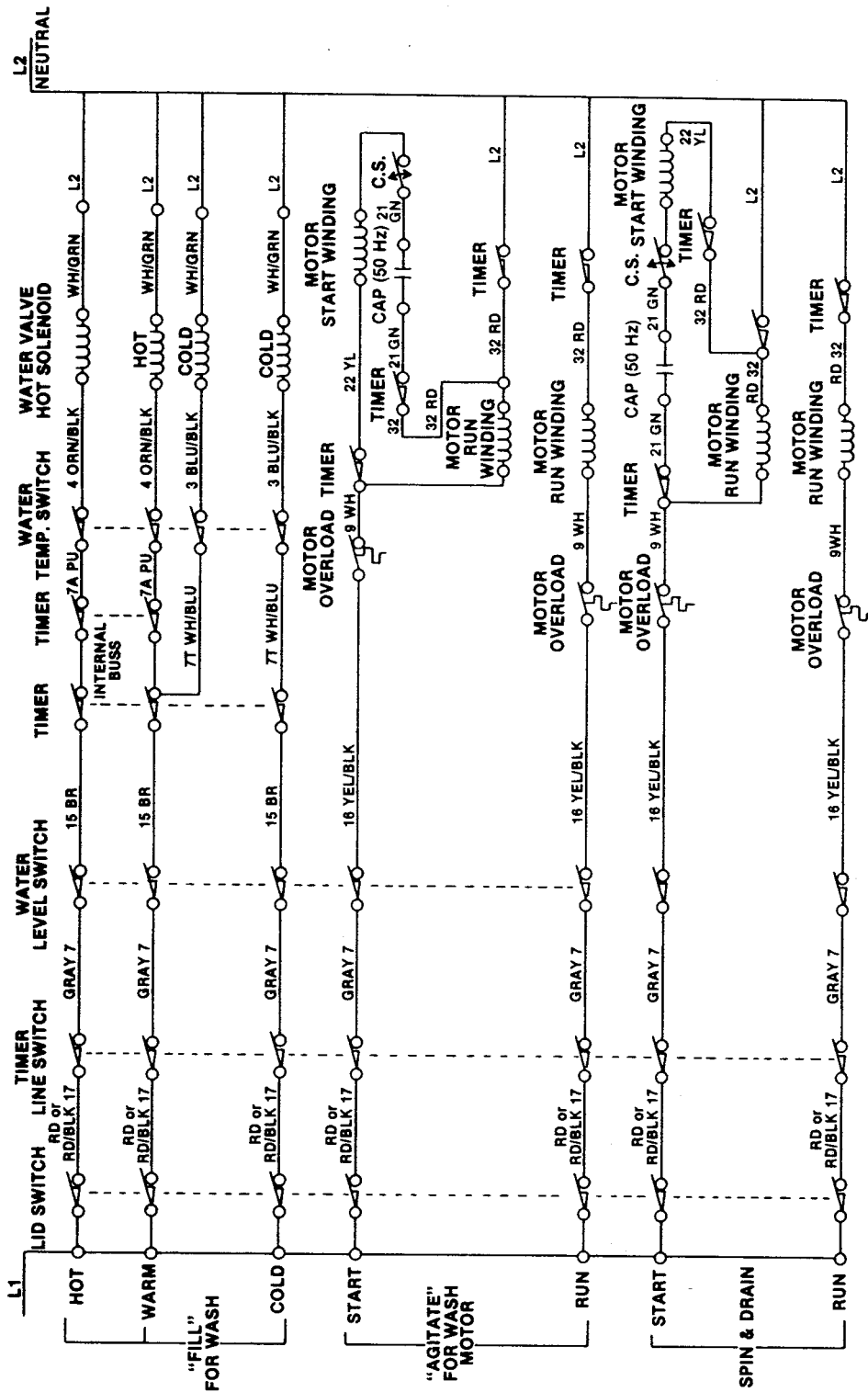


C.S. = centrifugal switch

LADDER DIAGRAM  
MODEL A510



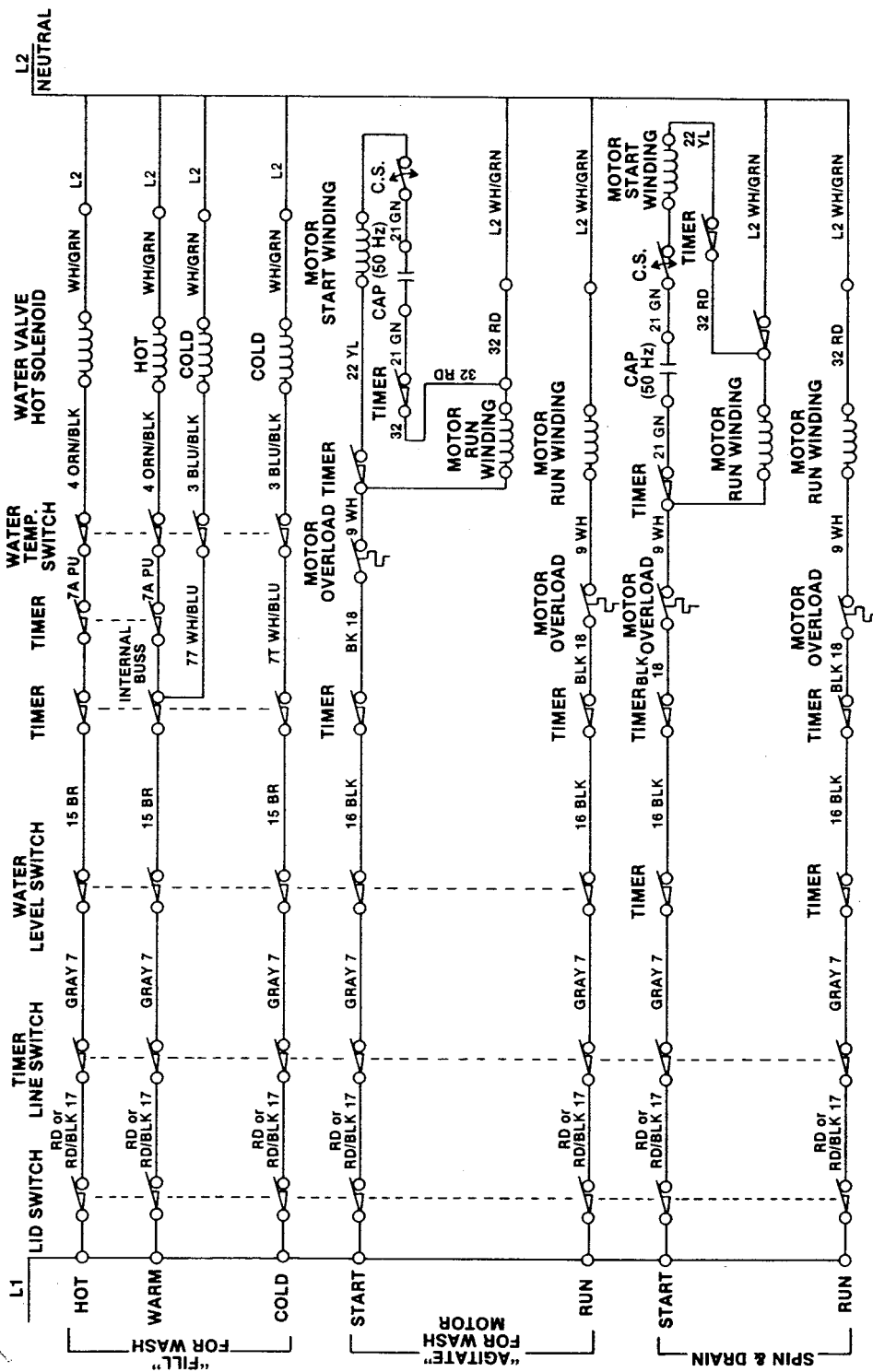
**ELECTRICAL SCHEMATIC — MODEL A511**



**LADDER DIAGRAM  
MODEL A511**

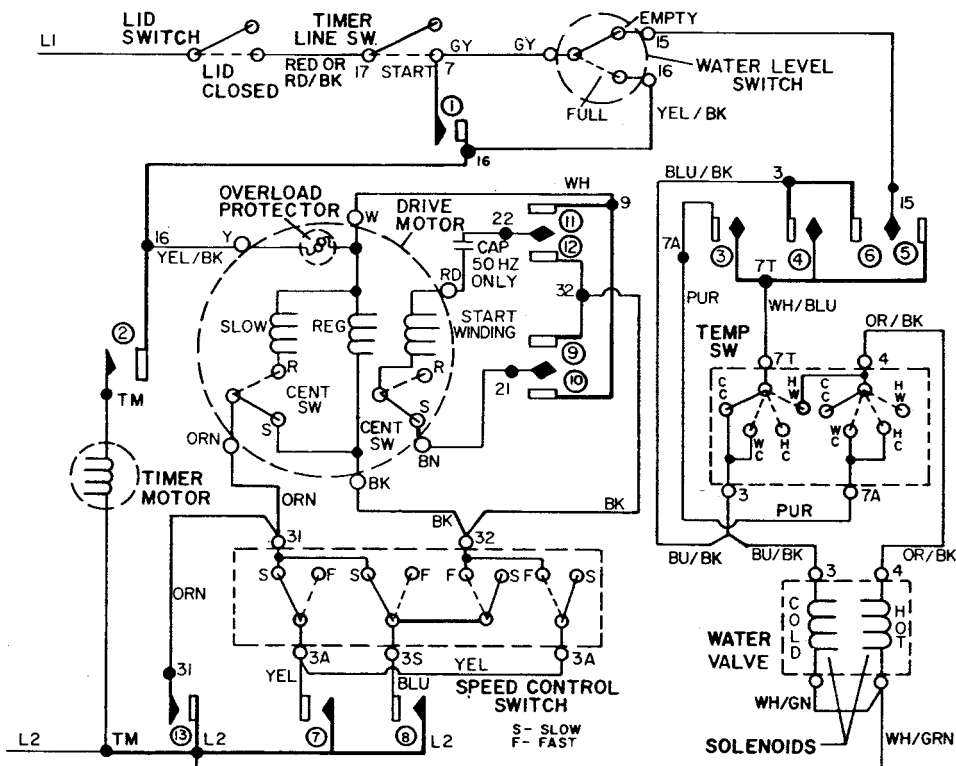
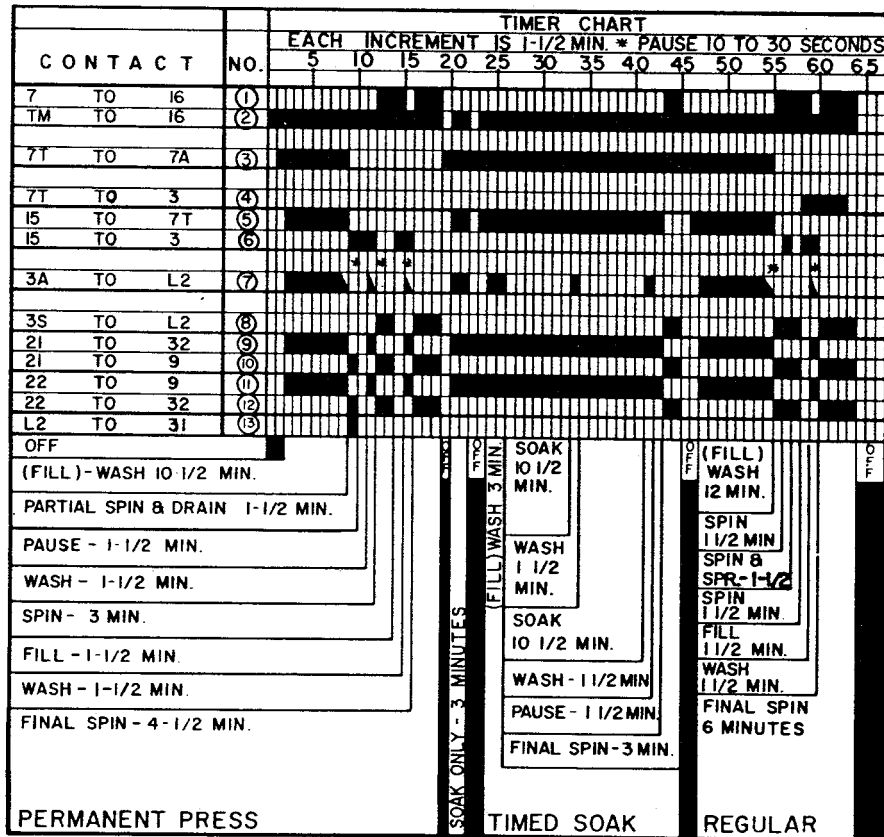




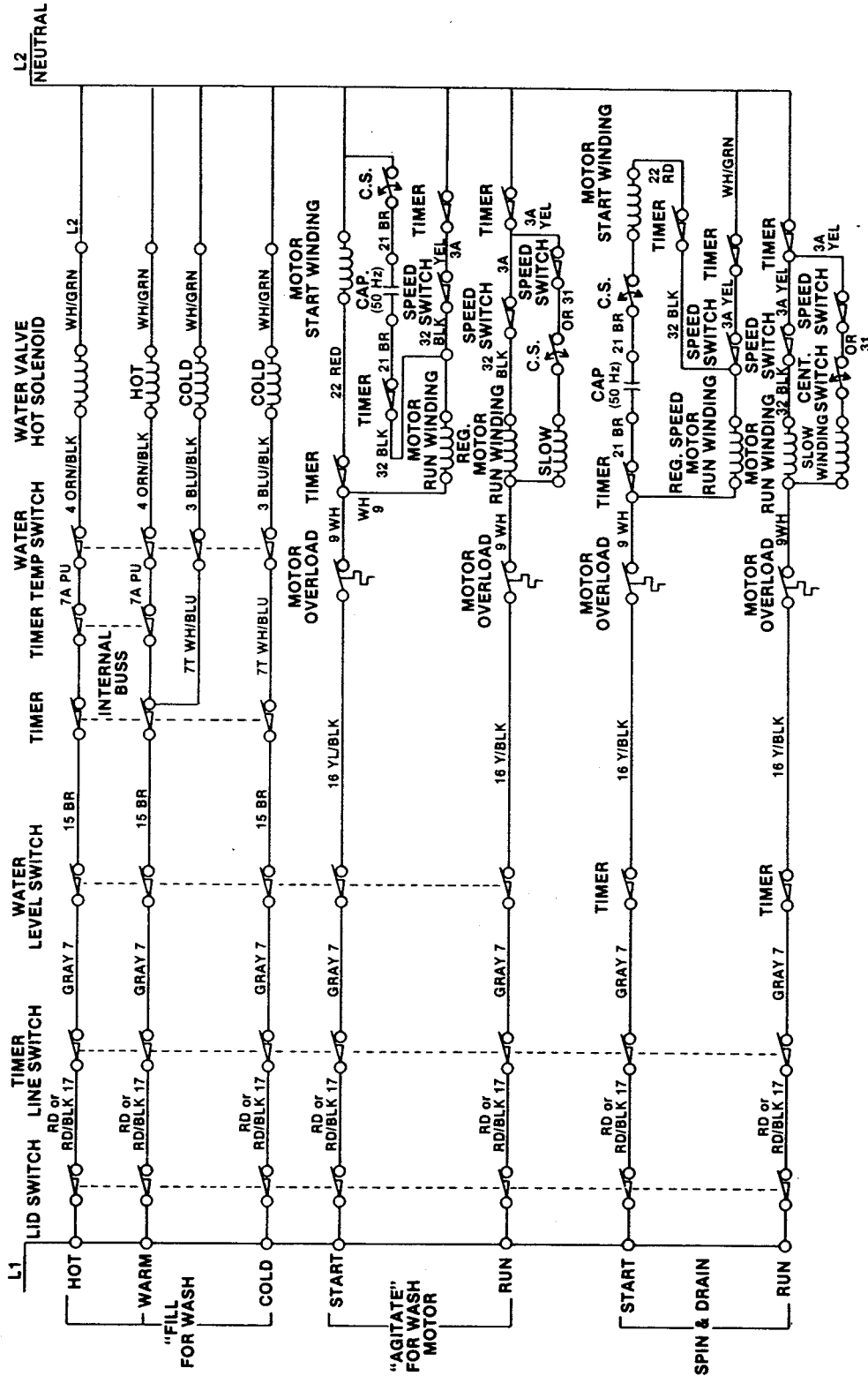


C.S. = centrifugal switch

# LADDER DIAGRAM MODEL A610

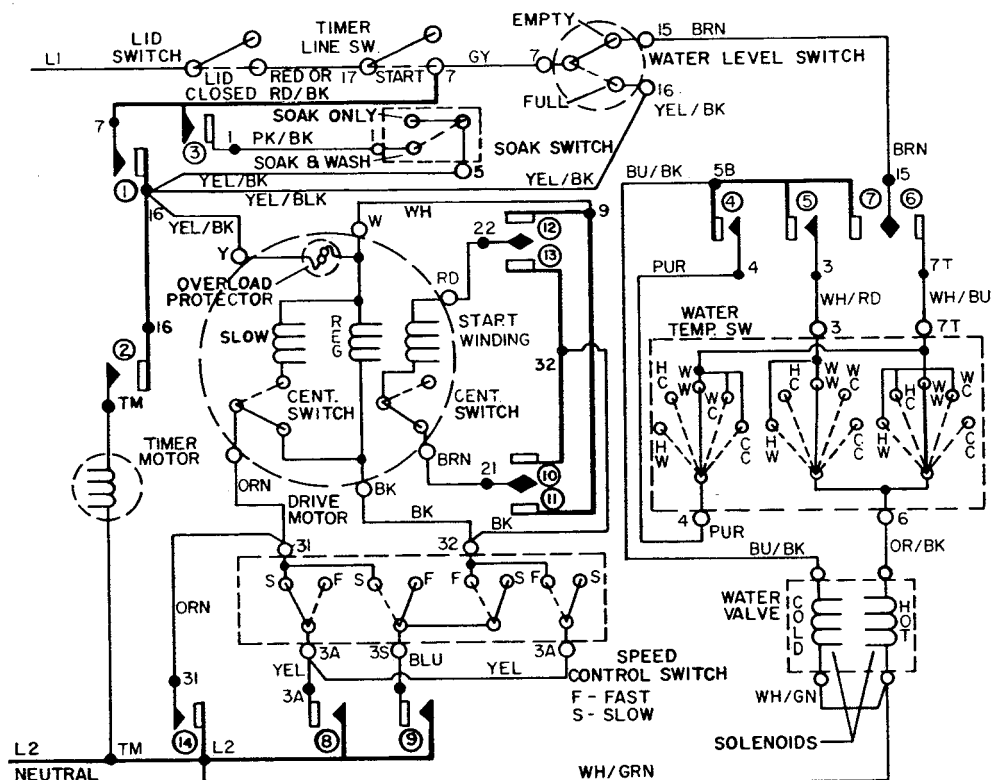
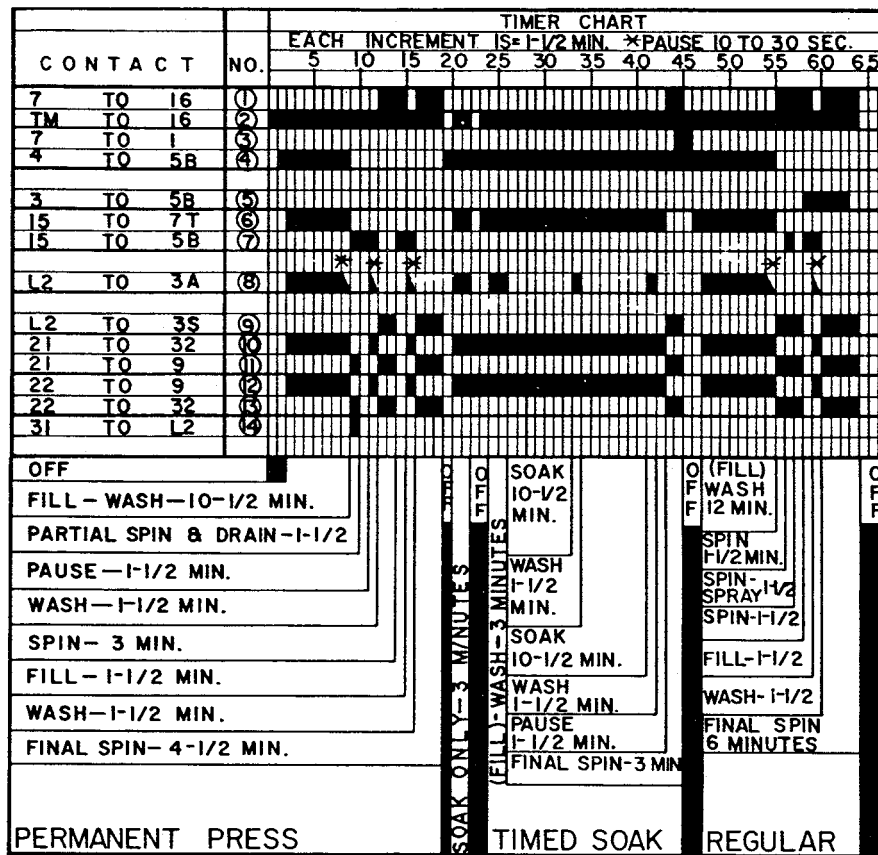


**ELECTRICAL SCHEMATIC  
MODEL A710**

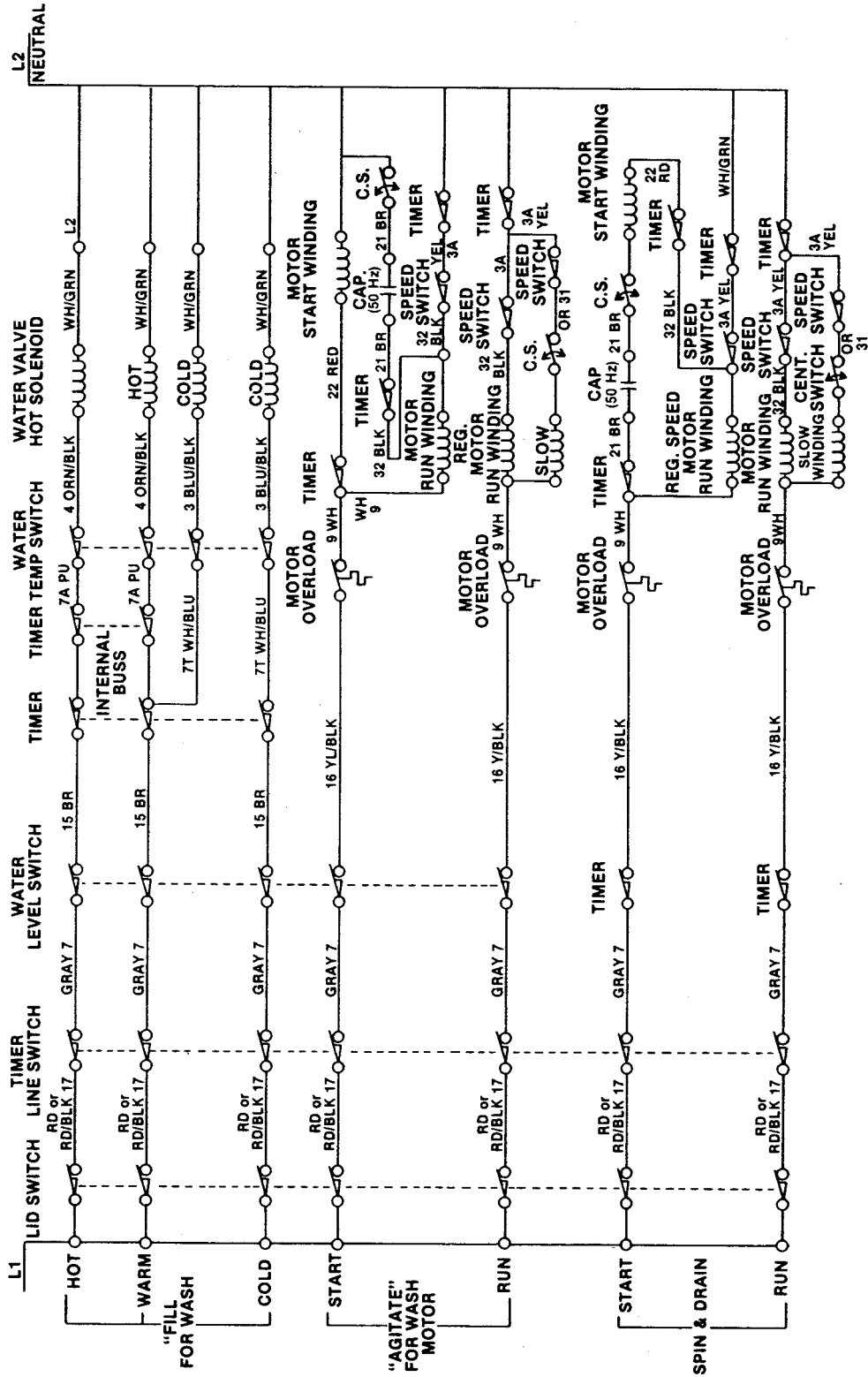


c.s. = centrifugal switch

## LADDER DIAGRAM MODEL A710

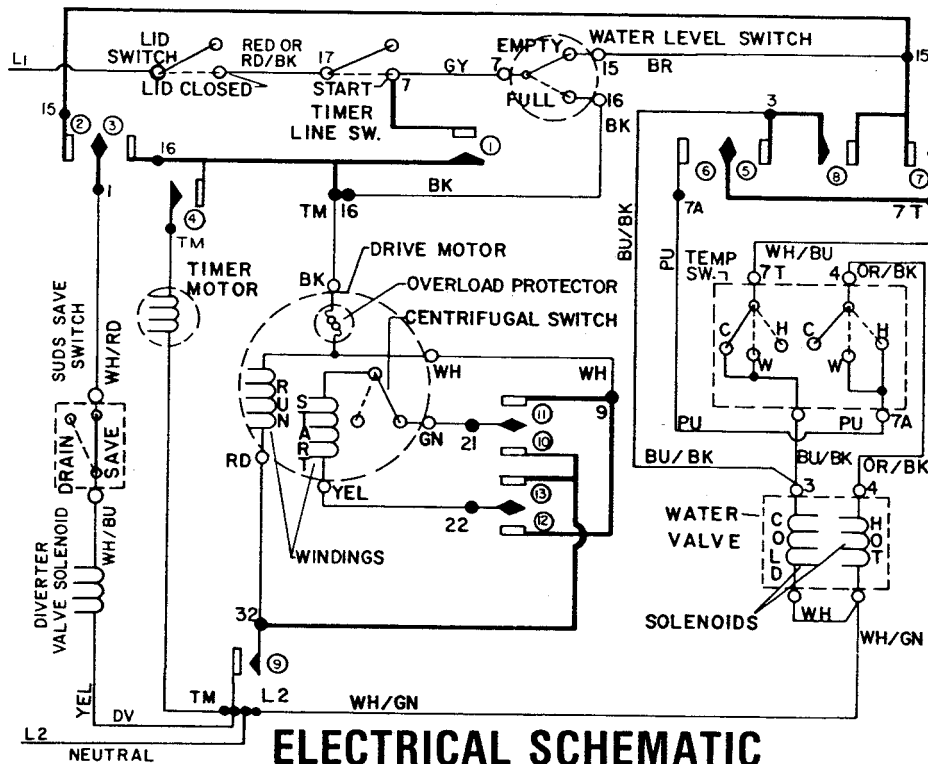
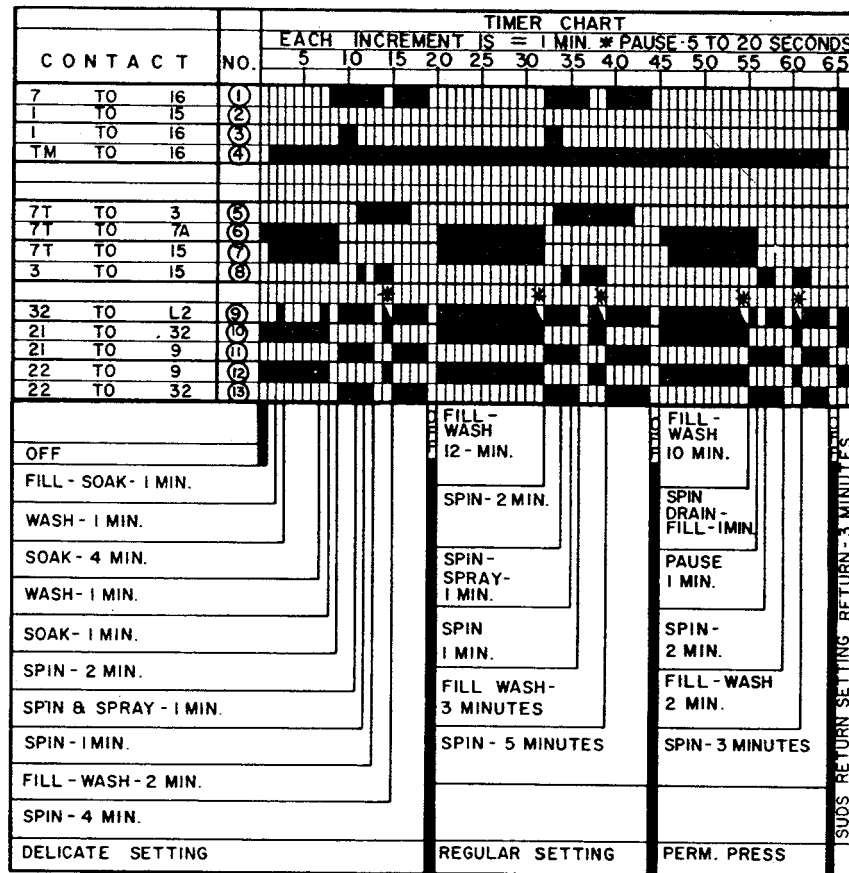


**ELECTRICAL SCHEMATIC  
MODEL A810**

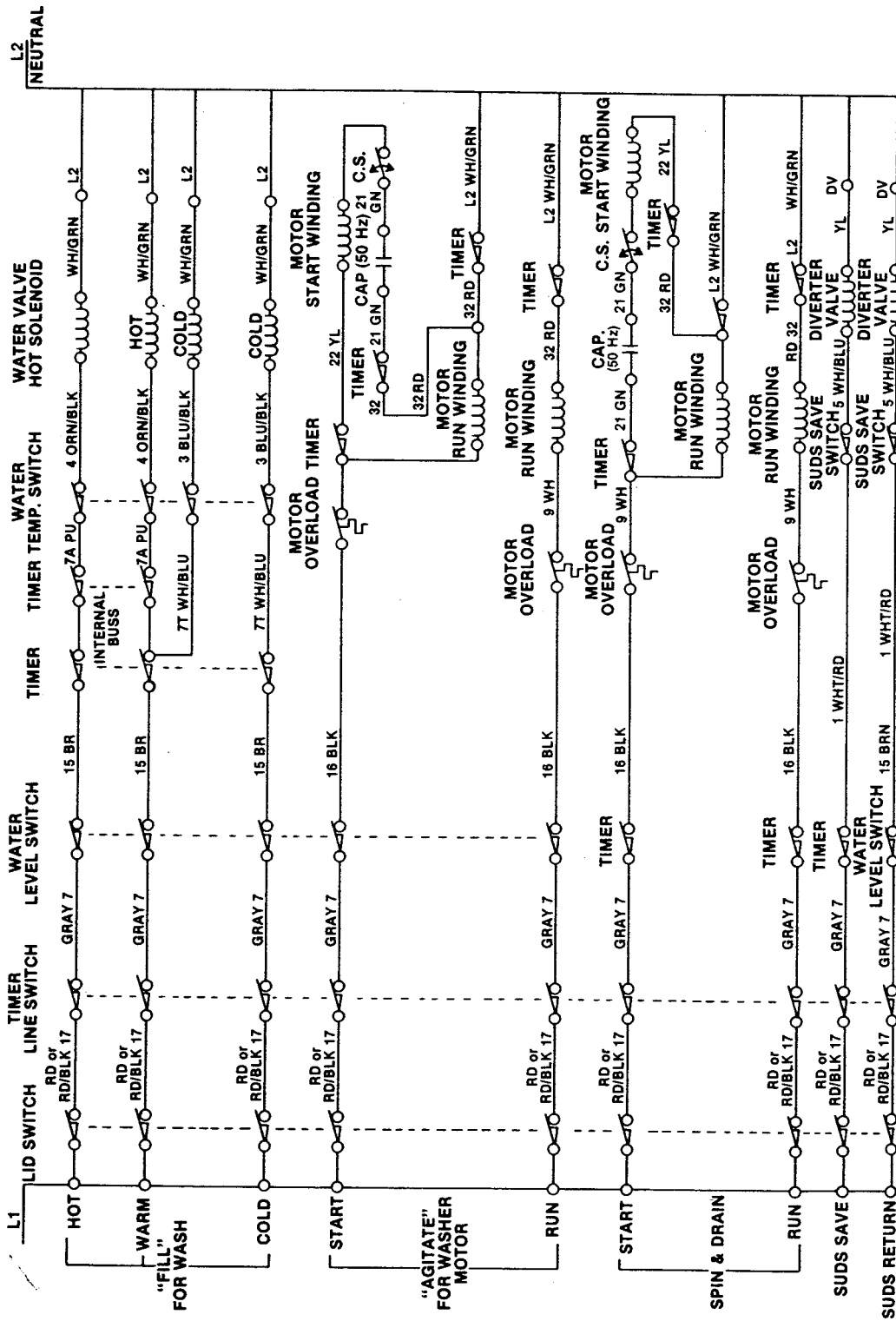


c.s. = centrifugal switch

LADDER DIAGRAM  
MODEL A810



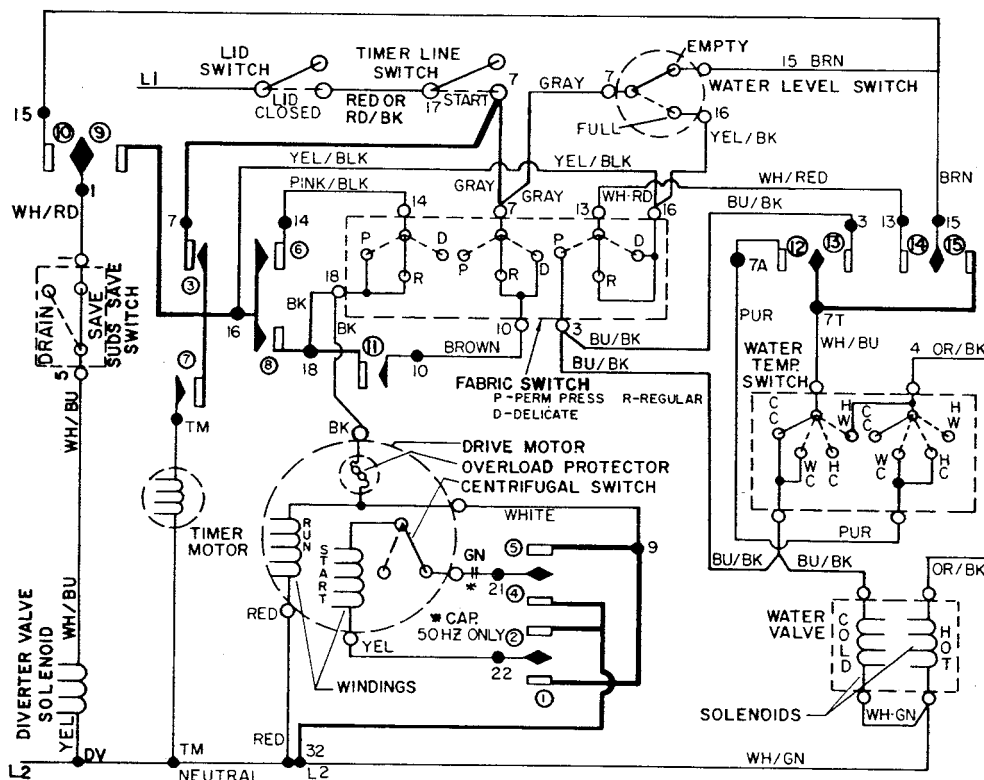
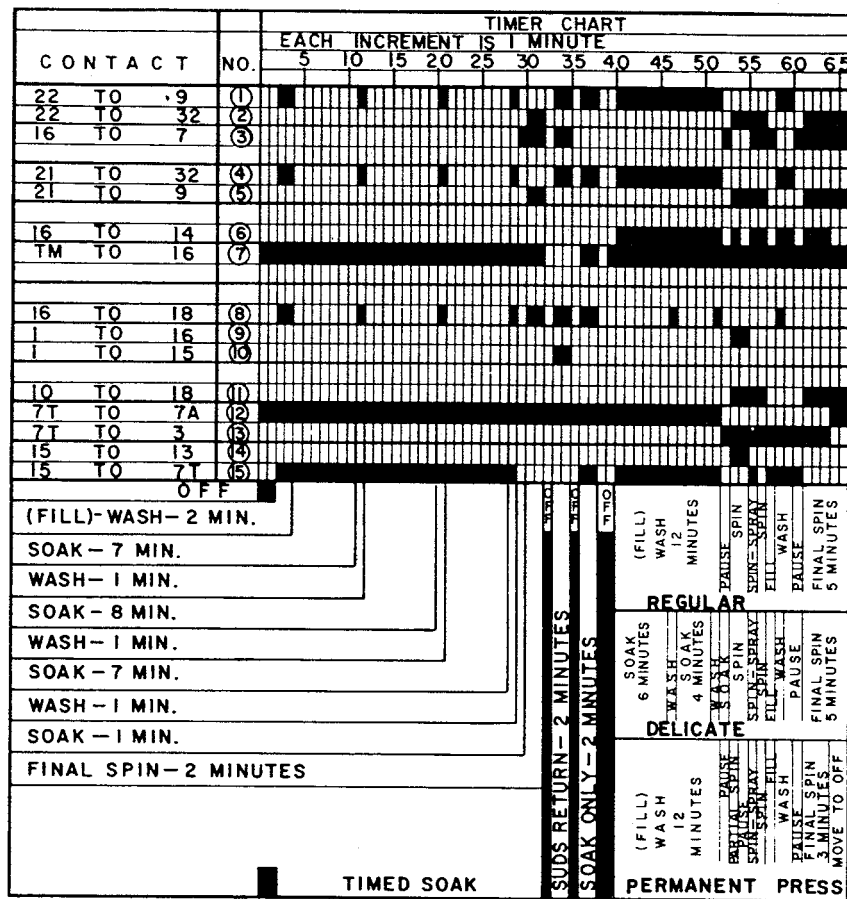
**ELECTRICAL SCHEMATIC  
MODEL A209S**



C.S. = centrifugal switch

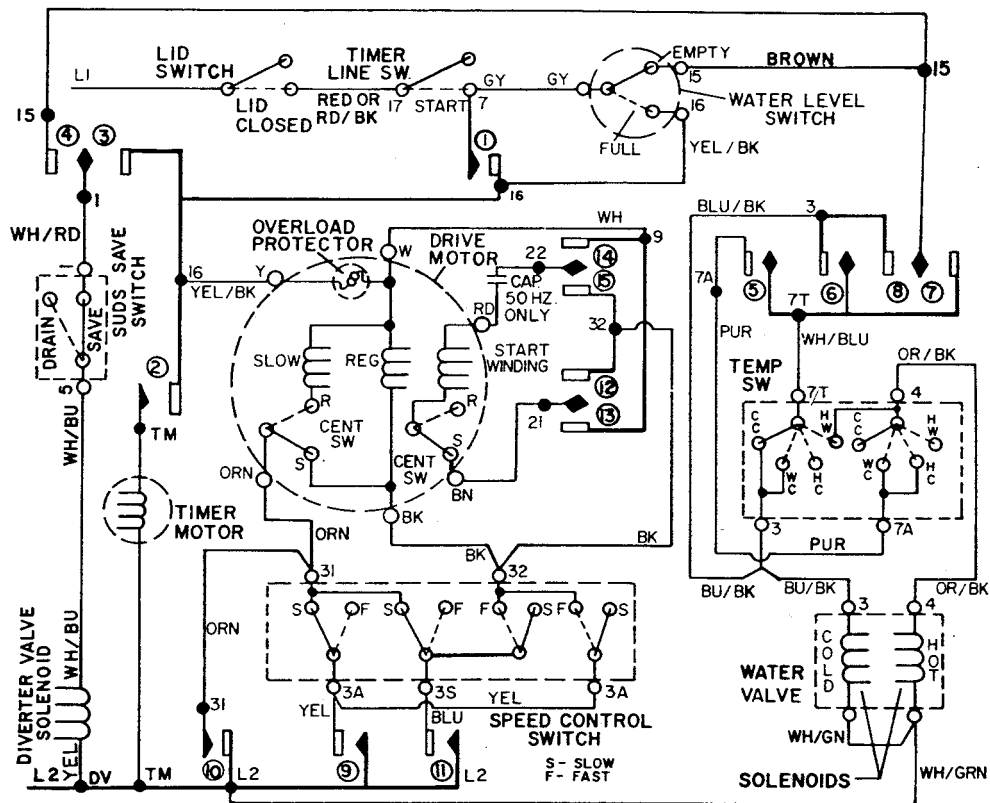
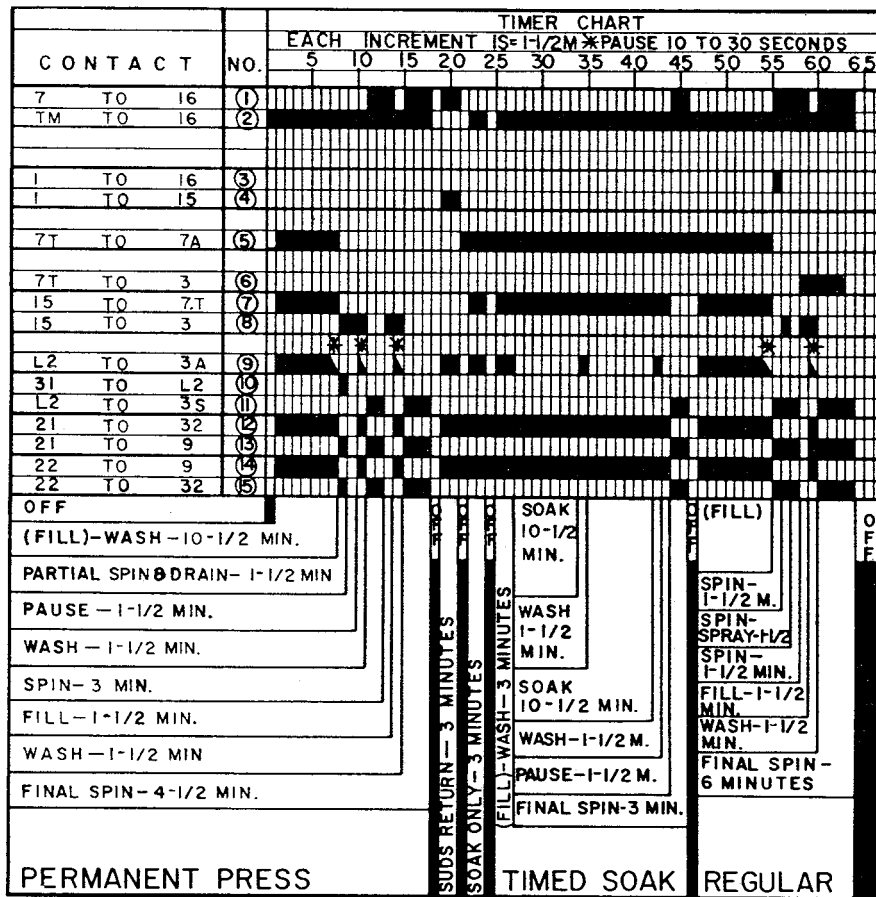
# LADDER DIAGRAM MODEL A209S





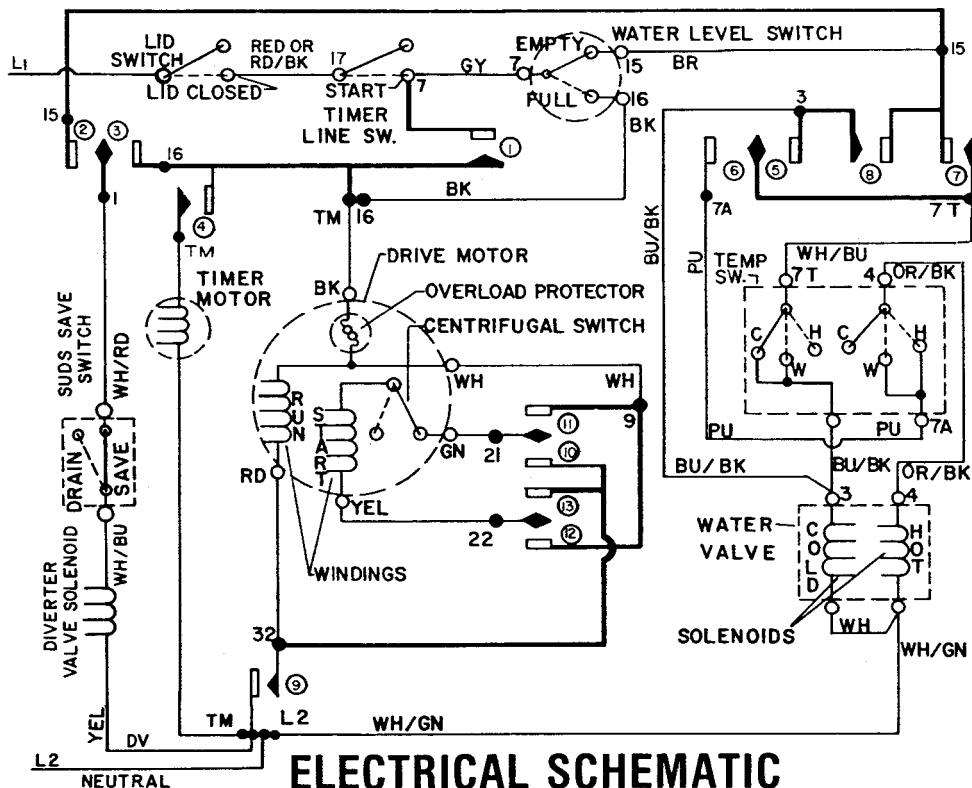
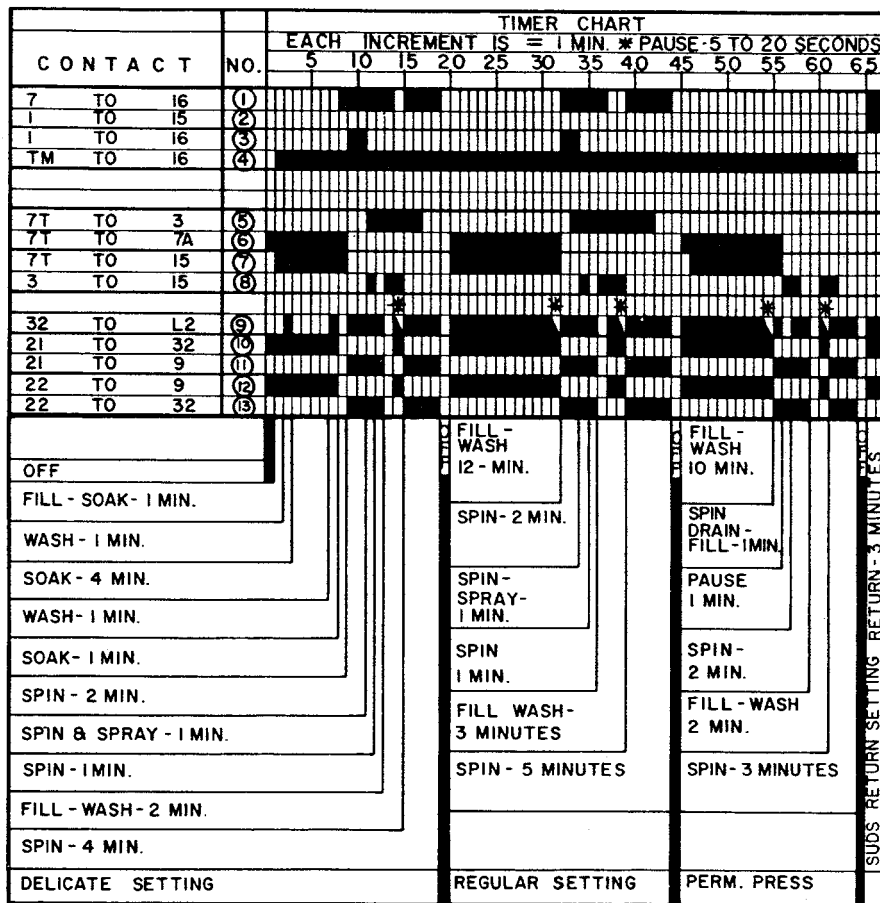
**ELECTRICAL SCHEMATIC**  
**MODEL A210S**

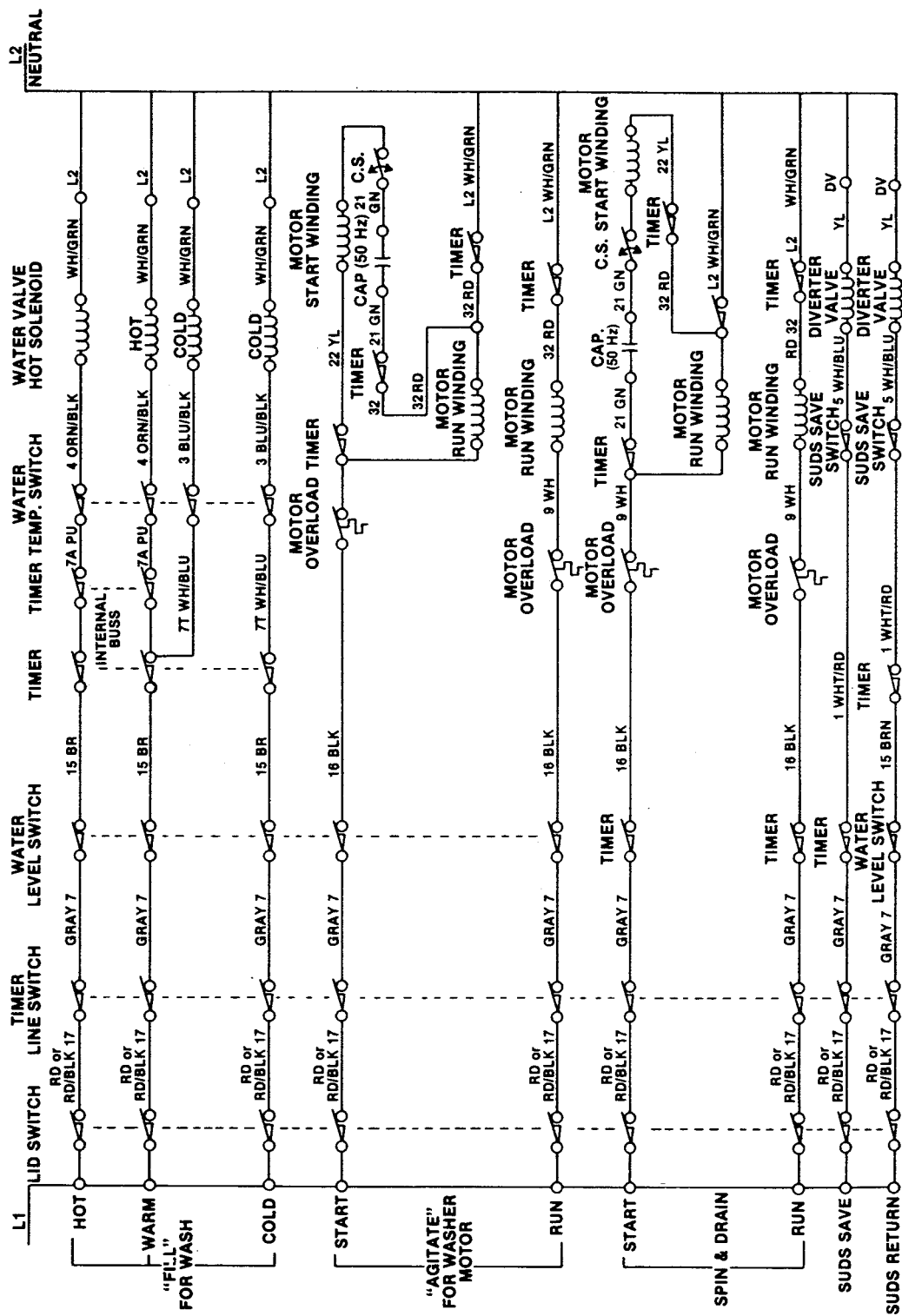




**ELECTRICAL SCHEMATIC  
MODEL A310S**

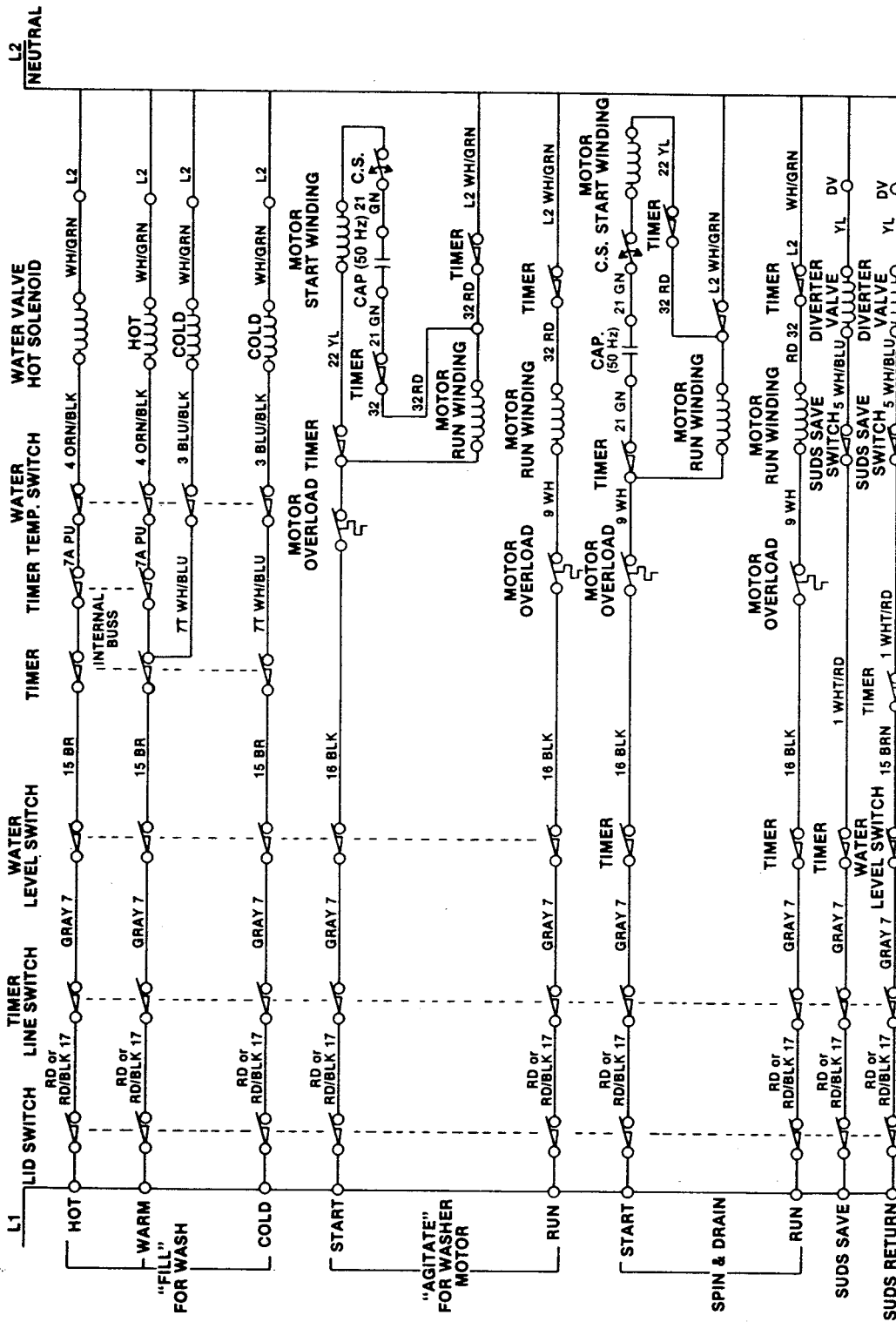






**LADDER DIAGRAM  
MODEL A510S**

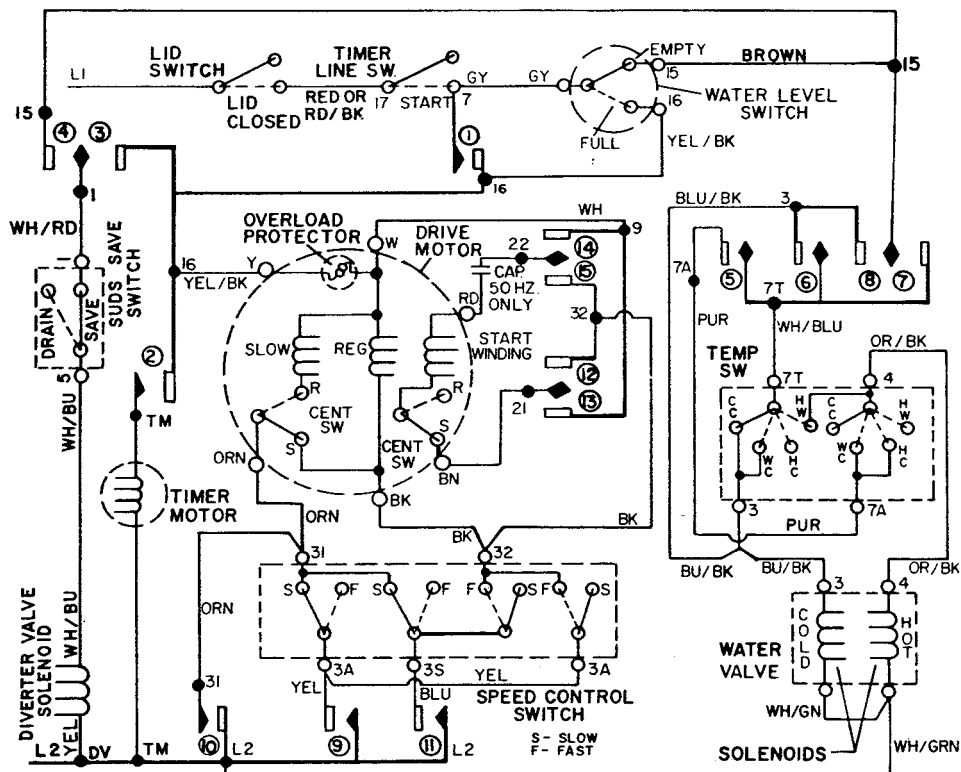
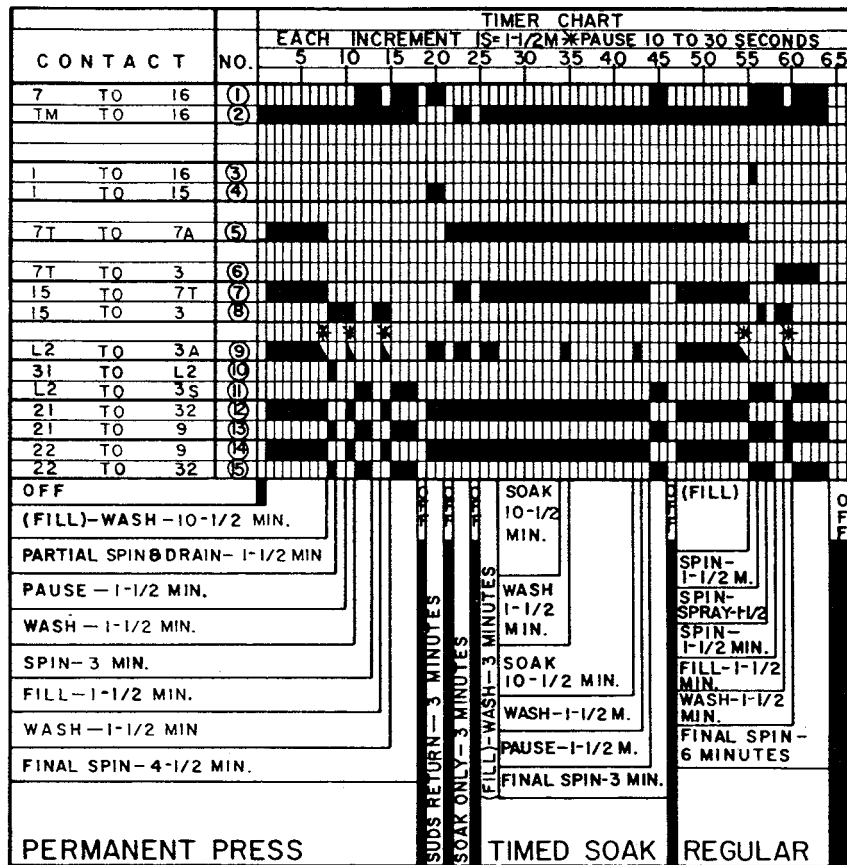




C.S. = centrifugal switch

# LADDER DIAGRAM MODEL A511S

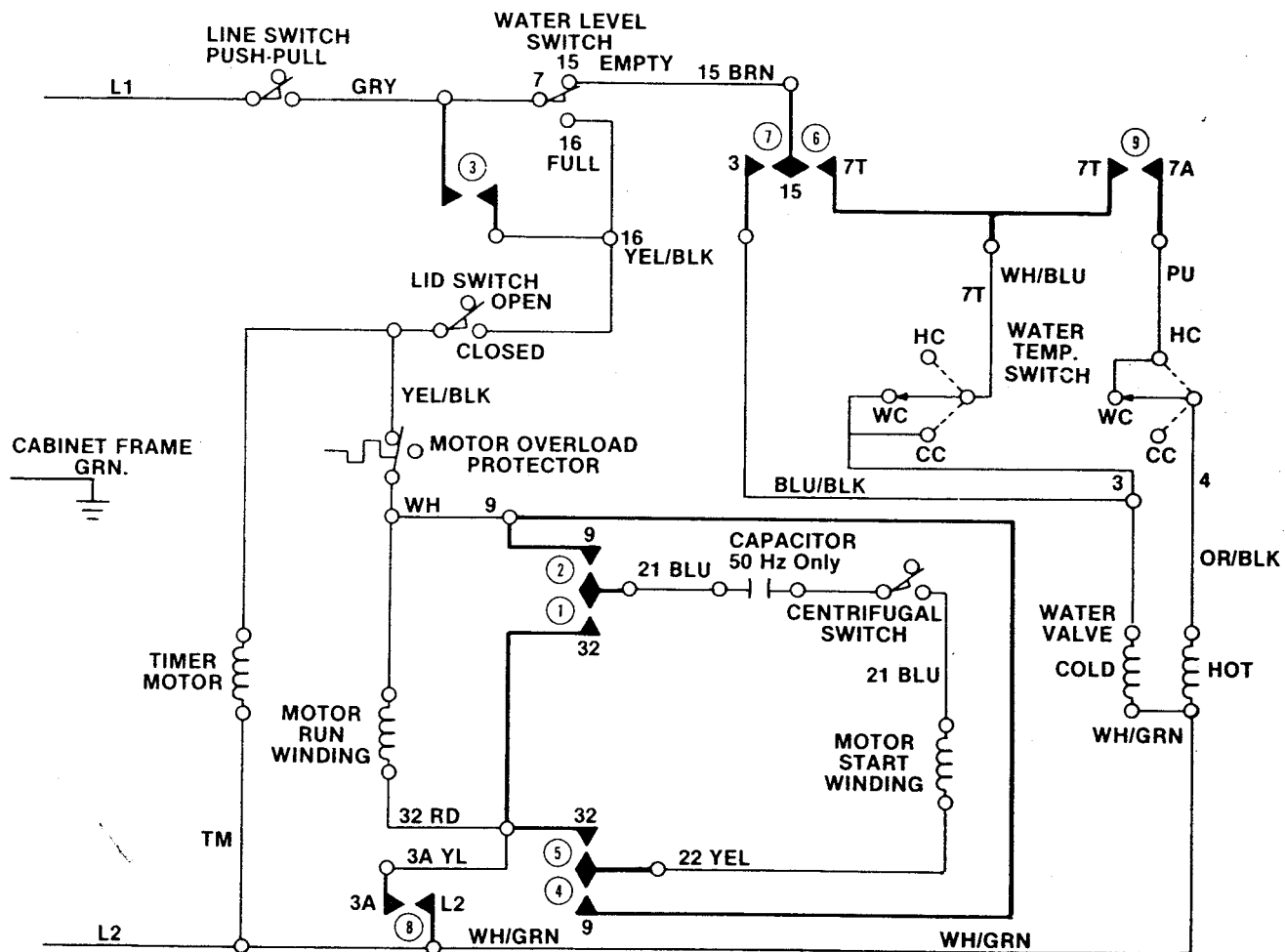




**ELECTRICAL SCHEMATIC  
MODEL A710S**

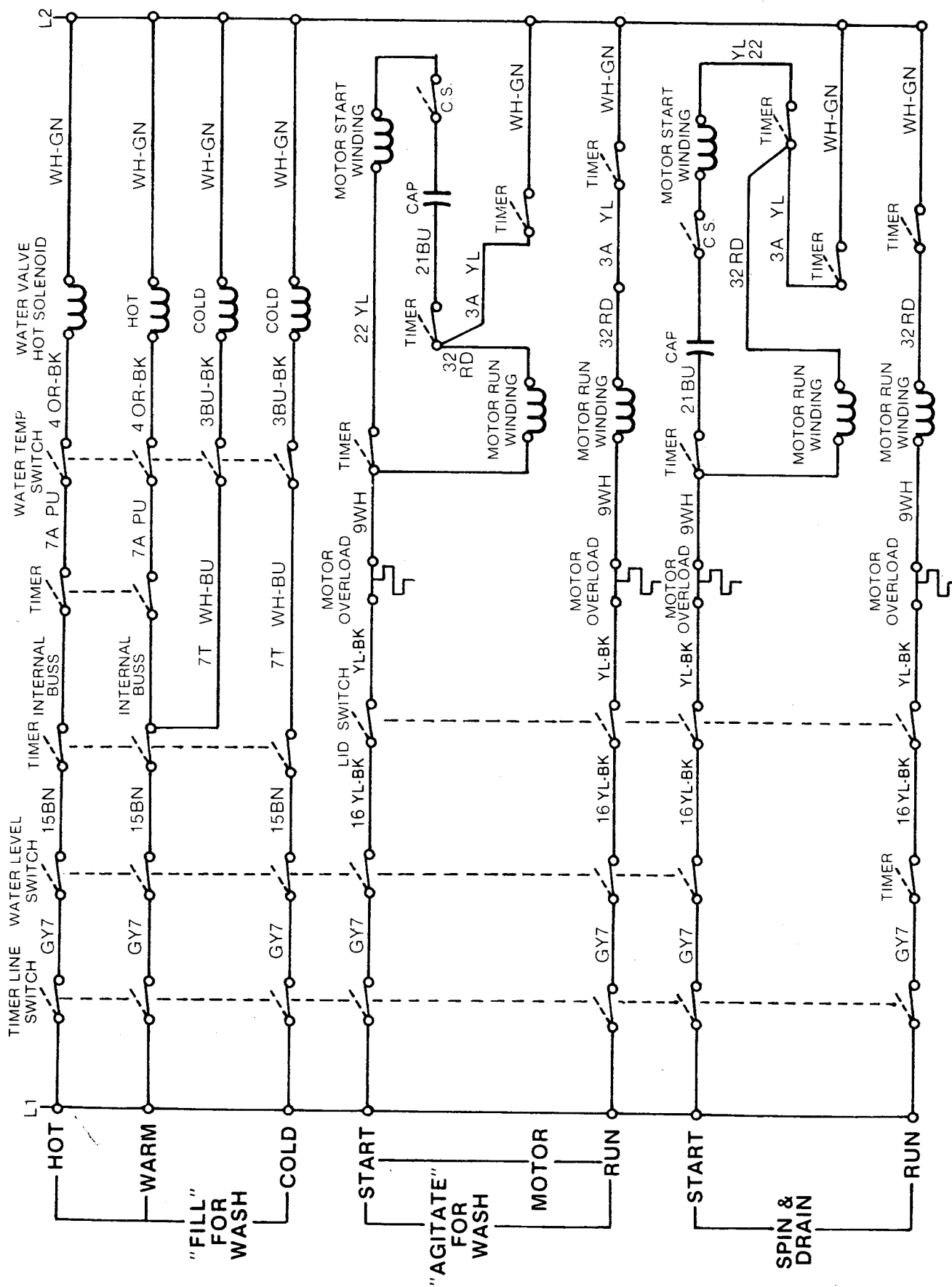


<div>60 Seconds Per Increment</div> <div><input type="checkbox"/> Cam Open <input type="checkbox"/> Cam Closed <input checked="" type="checkbox"/> Cam May Be Open or Closed</div> <div>CYCLE TIMES ARE APPROXIMATE</div>			PERMANENT PRESS				REGULAR FABRICS				CYCLE FUNCTION		
			10 FILL & WASH	1 PAUSE 1 COOL DOWN 1 PAUSE	2 FILL & WASH 2 SPIN	3 PAUSE 3 SPIN	12 FILL & WASH	1 PAUSE 1 SPIN & SPRAY 2 SPIN	5 SPIN	3 FILL & WASH 1 PAUSE			
Function	Cam No.	Contacts	5	10	15	20	25	30	35	40	45	50	
REVERSING-AGITATE	①	21 TO 32	X			X	X	X			X	X	
REVERSING-SPIN	②	21 TO 9	X		X	X	X	X			X		
SPIN & TM BYPASS	③	16TM to 7			X					X		X	
REVERSING-AGITATE	④	22 TO 9	X		X	X	X	X		X	X		
REVERSING-SPIN	⑤	22 TO 32	X			X	X	X		X		X	
FILL	⑥	15 TO 7T								X			
FILL	⑦	15 TO 3											
MOTOR INTERRUPTER	⑧	L2 TO 3A											
FILL	⑨	7A TO 7T	X		X		X			X			X



## MODELS A112, A412

## ELECTRICAL SCHEMATIC

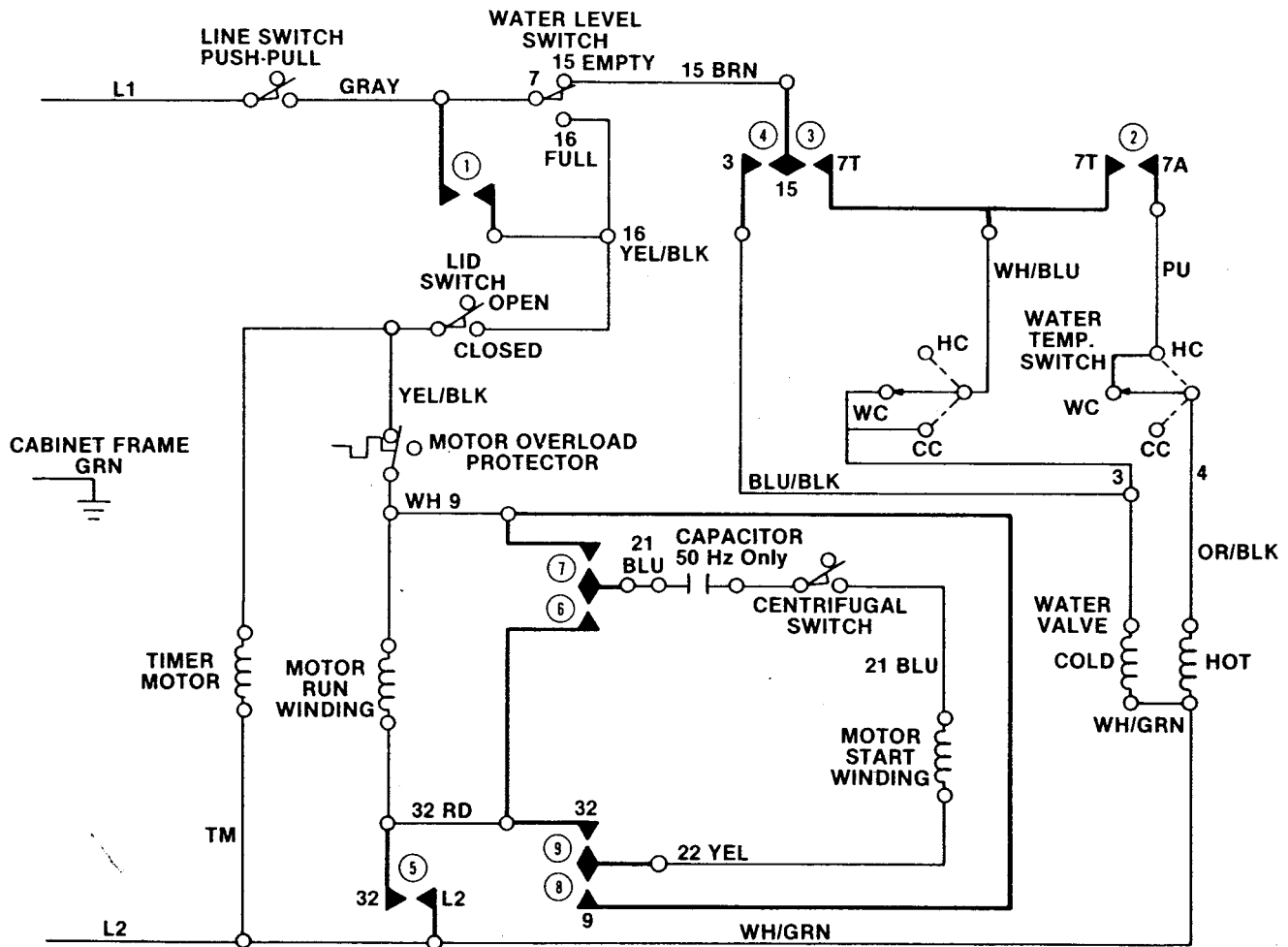


c.s. = centrifugal switch

# LADDER DIAGRAM A112 A412

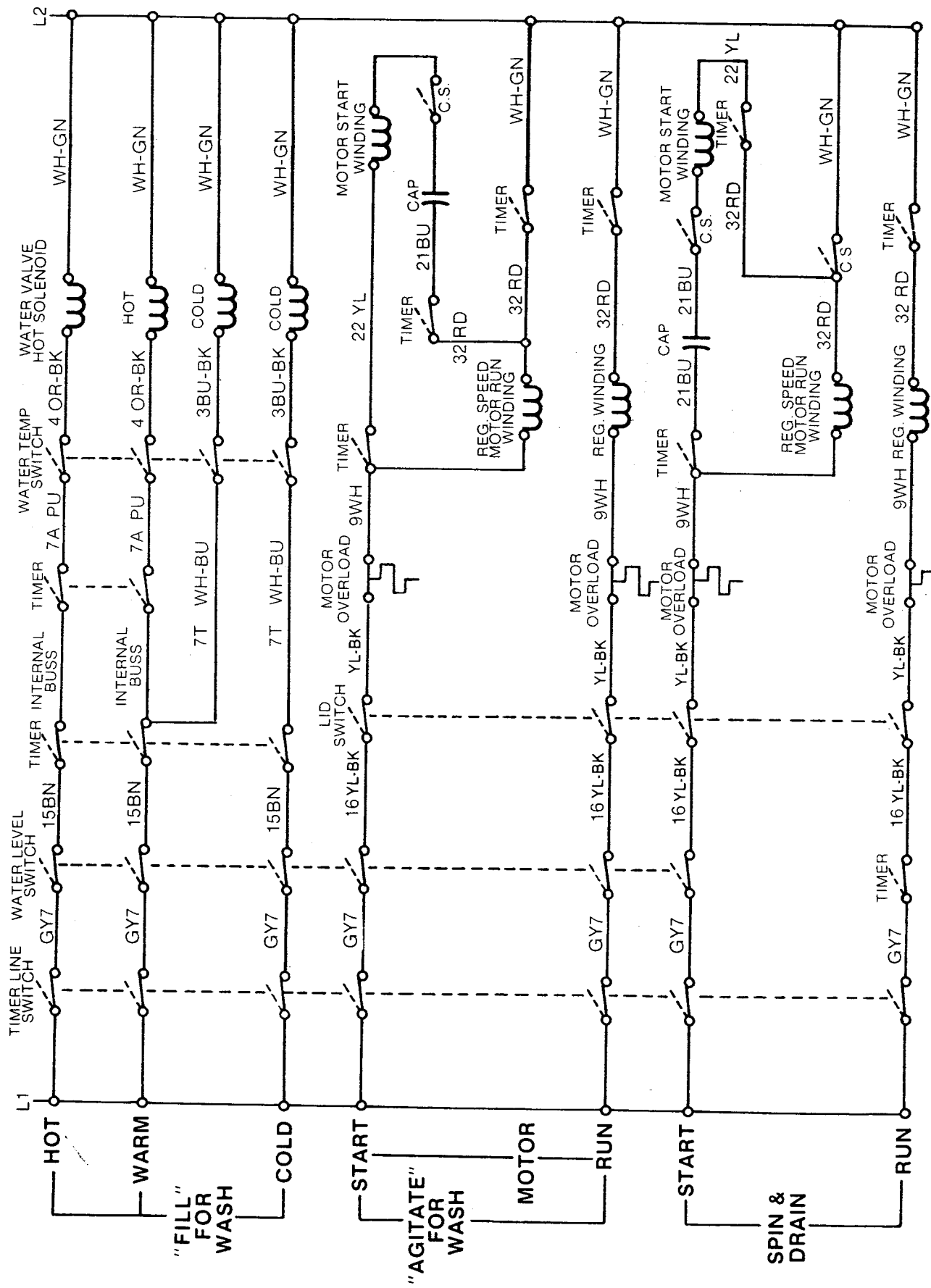
## AUTOMATIC WASHER

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CYCLE TIMES ARE APPROXIMATE			TIME															
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Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
CYCLE TIMES ARE APPROXIMATE			TIME															
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Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
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Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
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Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
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Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
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Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
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60 Seconds Per Increment			TIME															
Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
CYCLE TIMES ARE APPROXIMATE			TIME															
60 Seconds Per Increment			TIME															
Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
CYCLE TIMES ARE APPROXIMATE			TIME															
60 Seconds Per Increment			TIME															
Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
CYCLE TIMES ARE APPROXIMATE			TIME															
60 Seconds Per Increment			TIME															
Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															
CYCLE TIMES ARE APPROXIMATE			TIME															
60 Seconds Per Increment			TIME															
Cam Open Cam Closed Cam May Be Open or Closed			FUNCTION															



## MODELS A211, A212, A512

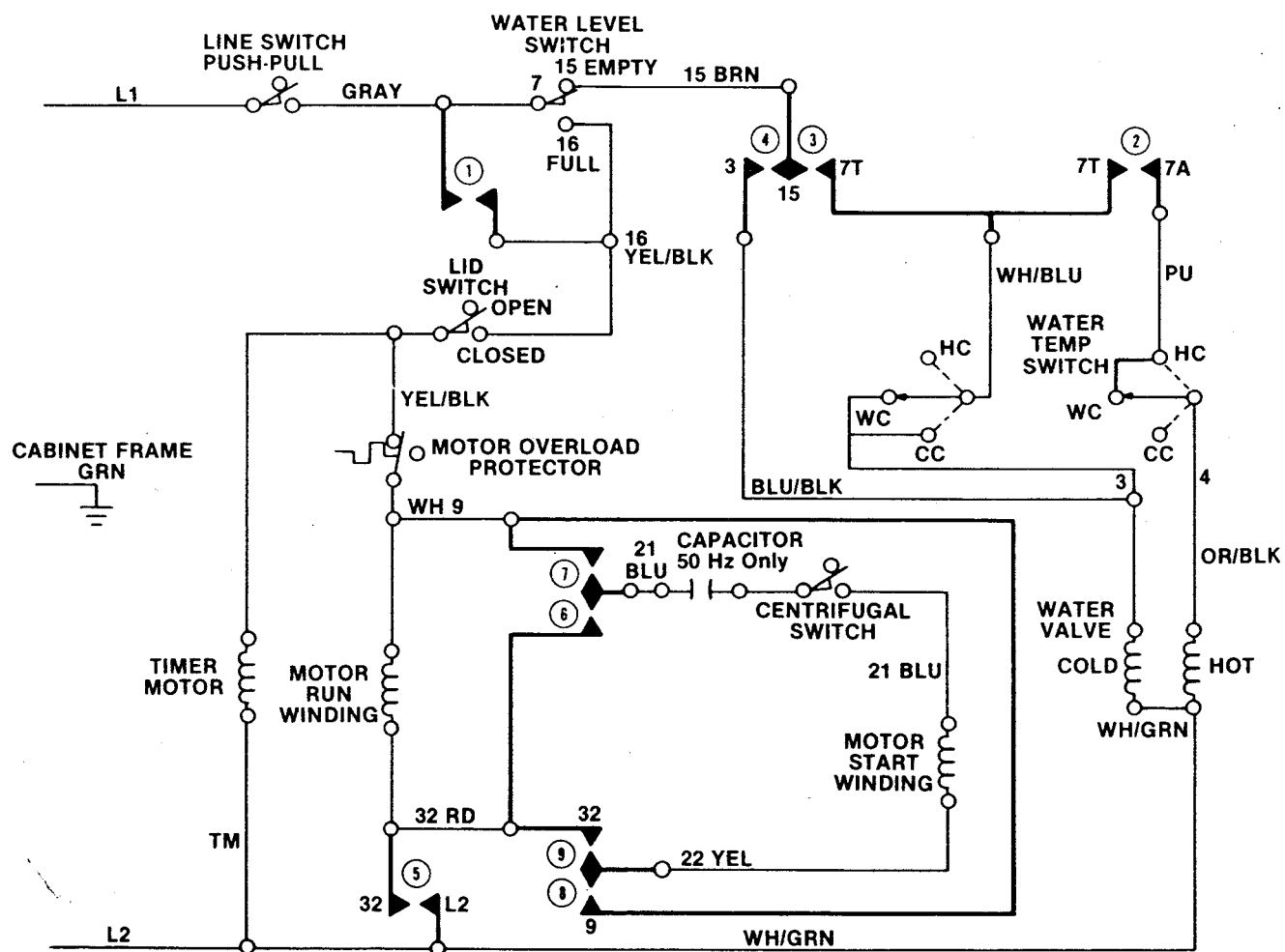
## ELECTRICAL SCHEMATIC



c.s. = centrifugal switch

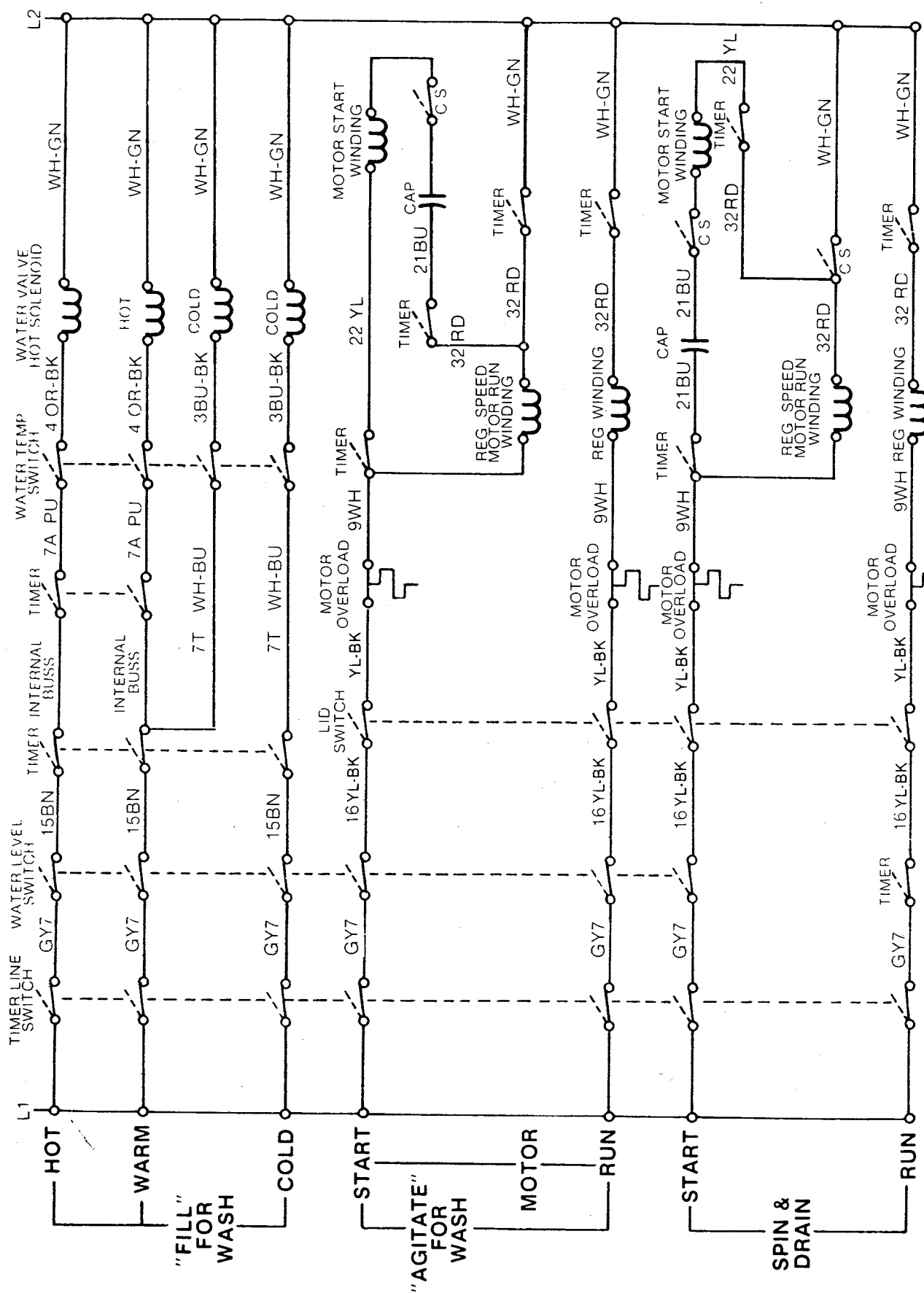
**AUTOMATIC WASHER**  
**LADDER DIAGRAM**  
**A211, A212, A512, A212 50HZ**

CYCLE TIMES ARE APPROXIMATE			CYCLE TIME FUNCTION															
60 Seconds Per Increment			CYCLE TIME FUNCTION															
Cam Open Cam Closed Cam May Be Open or Closed			CYCLE TIME FUNCTION															
CYCLE TIMES ARE APPROXIMATE			CYCLE TIME FUNCTION															
Function			CYCLE TIME FUNCTION															
Cam No.			CYCLE TIME FUNCTION															
Contacts			CYCLE TIME FUNCTION															
SPIN & TM MOTOR			CYCLE TIME FUNCTION															
FILL			CYCLE TIME FUNCTION															
FILL			CYCLE TIME FUNCTION															
FILL			CYCLE TIME FUNCTION															
MOTOR INTERRUPTER			CYCLE TIME FUNCTION															
REVERSING-AGITATE			CYCLE TIME FUNCTION															
REVERSING-SPIN			CYCLE TIME FUNCTION															
REVERSING-AGITATE			CYCLE TIME FUNCTION															
REVERSING-SPIN			CYCLE TIME FUNCTION															



# MODEL A506

## ELECTRICAL SCHEMATIC



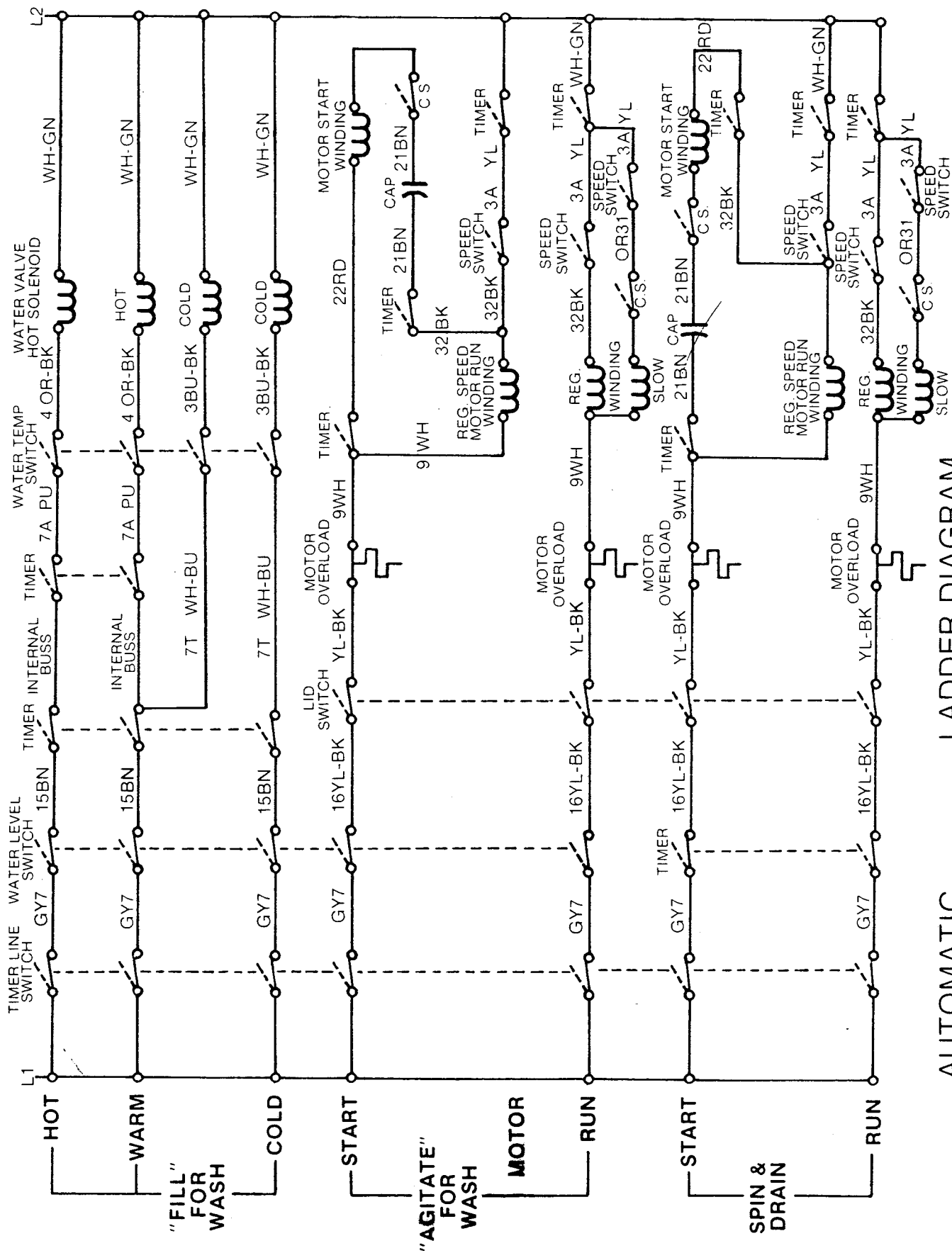
c.s. = centrifugal switch

# LADDER DIAGRAM A506

## AUTOMATIC WASHER





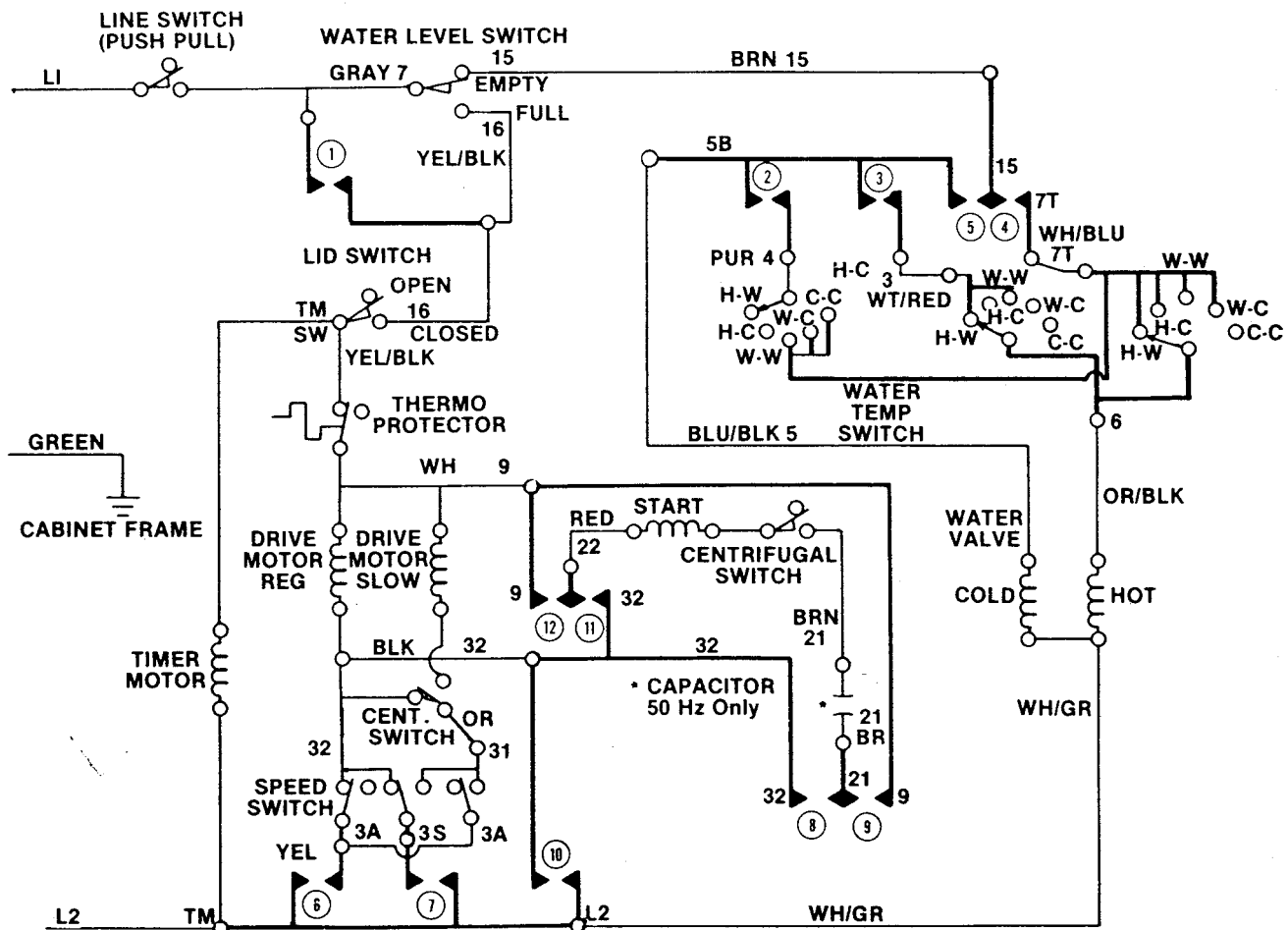


c.s. = centrifugal switch

LADDER DIAGRAM  
A312 A612

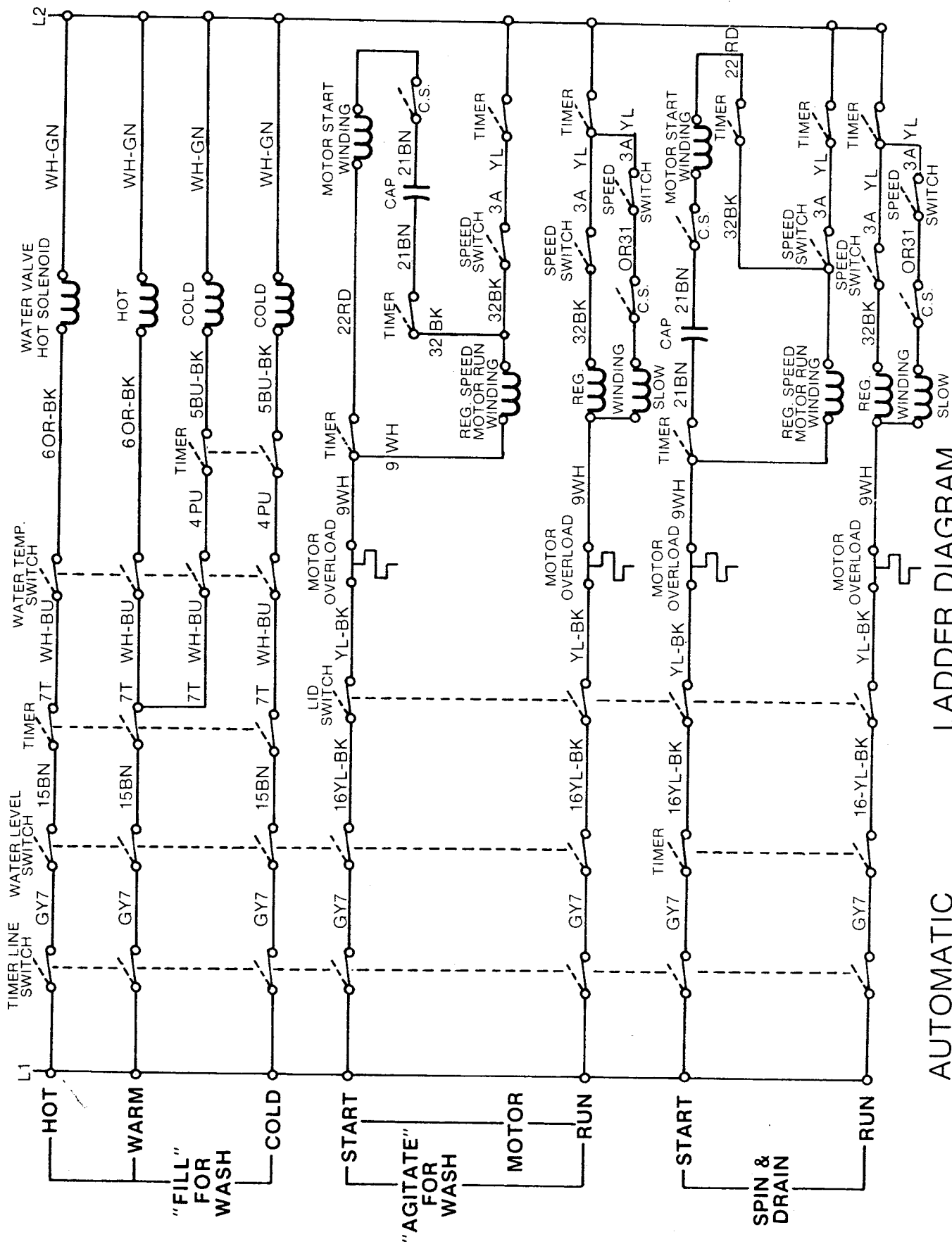
AUTOMATIC  
WASHER

60 Seconds Per Increment <input type="checkbox"/> Cam Open <input type="checkbox"/> Cam Closed <input checked="" type="checkbox"/> Cam May Be Open or Closed			PERMANENT PRESS					SOAK				REGULAR FABRICS					CYCLE TIME FUNCTION
			5	10	15	20	25	30	35	40	45	50	55	60	65	70	
Function	Cam No.	Contacts															
SPIN and TM BYPASS	①	7 TO 16															
FILL	②	4 TO 5B															
FILL	③	3 TO 5B															
FILL	④	15 TO 7T															
FILL	⑤	15 TO 5B															
AGITATE INTERRUPT	⑥	3A TO L2															
SPIN INTERRUPTER	⑦	3STO L2															
REVERSING-AGITATE	⑧	21 TO 32															
REVERSING-SPIN	⑨	21 TO 9															
ASSURED HIGH SPEED INT.	⑩	L2 TO 32															
REVERSING-AGITATE	⑪	22 TO 9															
REVERSING-SPIN	⑫	22 TO 32															



MODEL A712

ELECTRICAL  
SCHEMATICS

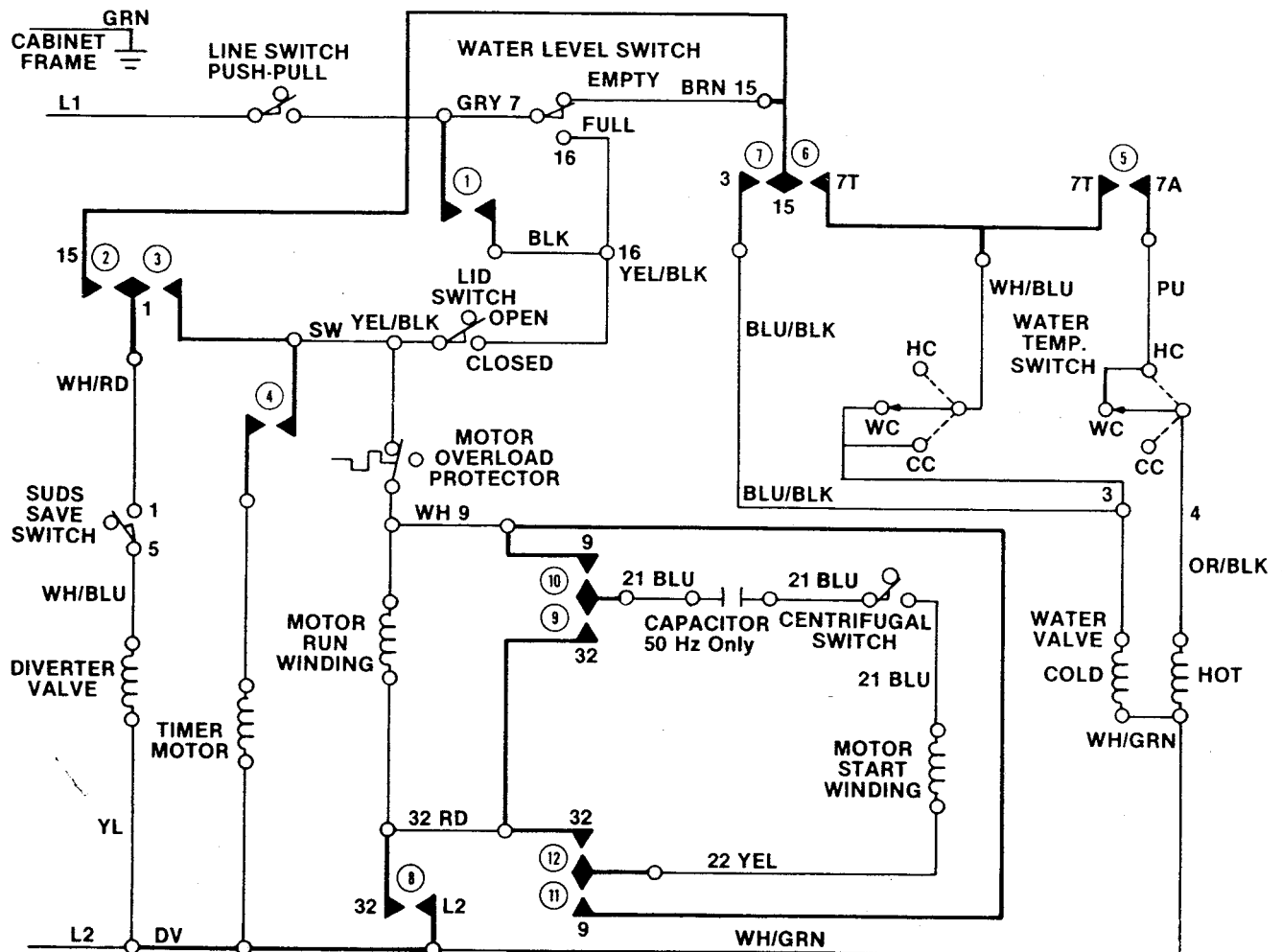


c.s. = centrifugal switch

LADDER DIAGRAM  
A712

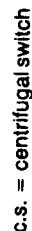
AUTOMATIC  
WASHER

60 Seconds Per Increment			PERMANENT PRESS		DELICATE		REGULAR		CYCLE TIME	FUNCTION
<input type="checkbox"/> Cam Open <input checked="" type="checkbox"/> Cam Closed <input checked="" type="checkbox"/> Cam May Be Open or Closed			10	3	1	4	12	5		
CYCLE TIMES ARE APPROXIMATE			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
			10	3	1	4	12	5		
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			10	3	1	4	12	5		



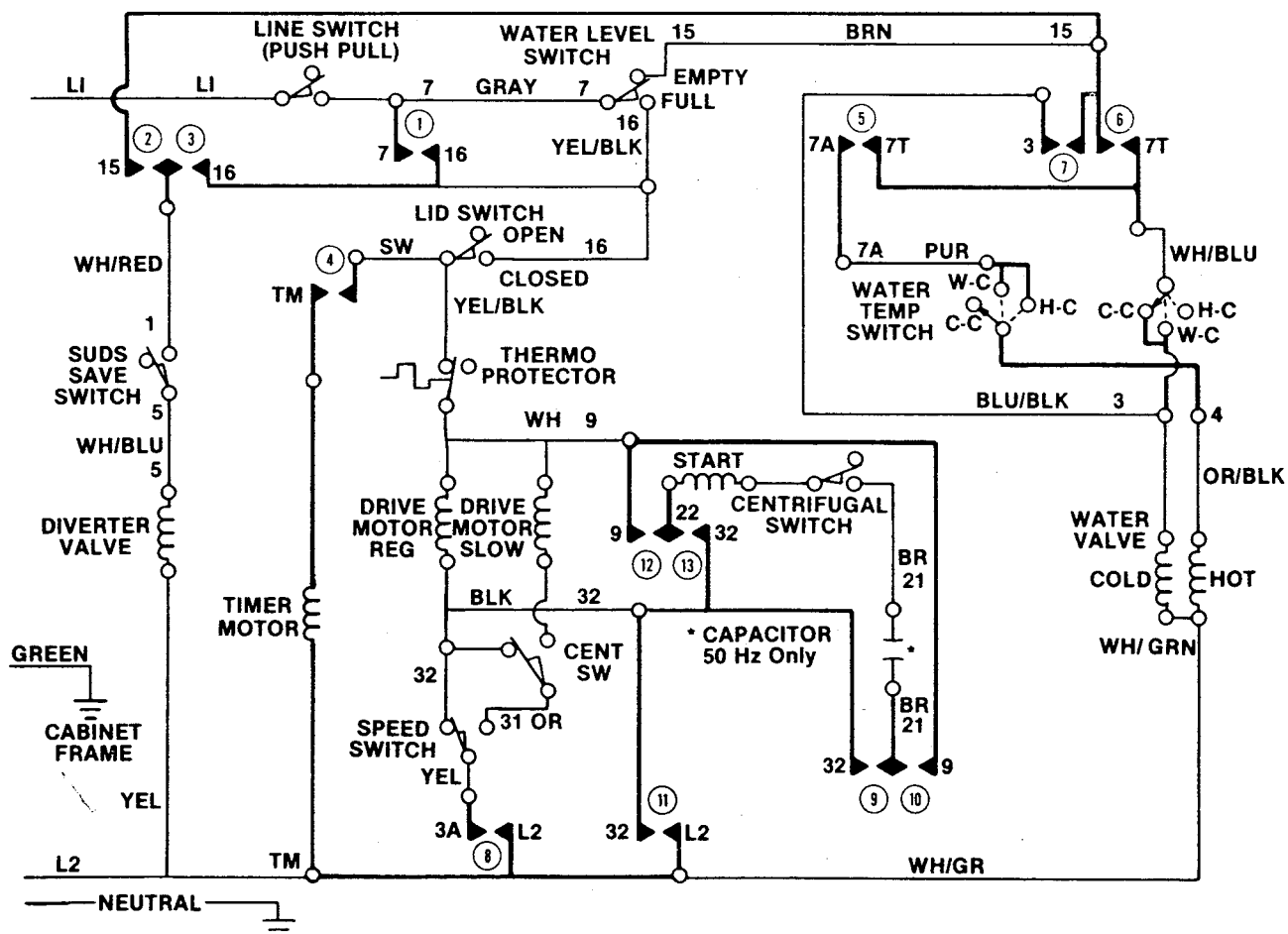
MODELS A211S, A512S, A212S

ELECTRICAL  
SCHEMATIC



AUTOMATIC  
WASHER

60 Seconds Per Increment			P.P.												SOAK				REG				CYCLE TIME	FUNCTION
<input type="checkbox"/> Cam Open <input checked="" type="checkbox"/> Cam Closed <input checked="" type="checkbox"/> Cam May Be Open or Closed			12 FILL & WASH												1 WASH 4 SOAK 1 WASH 4 SOAK				12 FILL AND WASH 2 SPIN 2 RINSE 1 SPIN 1 SPRAY 2 SUDS SAVE					
Function	Cam No.	Contacts	5	10	15	20	25	30	35	40	45	50	55	60	65	70								
SPIN AND TM BYPASS	①	7 TO 16																						
SUDS RETURN	②	1 TO 15																						
SUDS SAVE	③	1 TO 16																						
TM ON-OFF	④	TMTOSW																						
FILL	⑤	7T TO 7A																						
FILL	⑥	7T TO 15																						
FILL	⑦	3 TO 15																						
MOTOR INTERRUPTER	⑧	3A TO L2																						
REVERSING-AGITATE	⑨	21 TO 32																						
REVERSING-SPIN	⑩	21 TO 9																						
ASSURED HIGH SPEED INT.	⑪	L2 TO 32																						
REVERSING-AGITATE	⑫	22 TO 9																						
REVERSING-SPIN	⑬	22 TO 32																						



MODELS A312S • A612S

ELECTRICAL  
SCHEMATICS







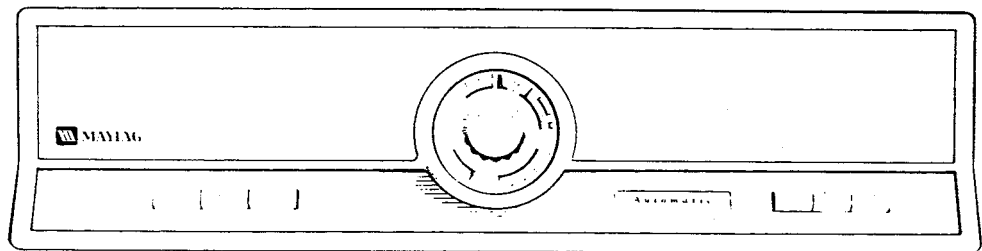


## Section 5

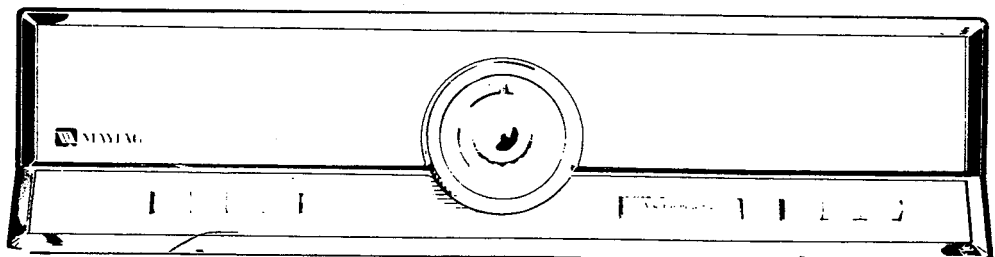
### General

# "08" MODELS

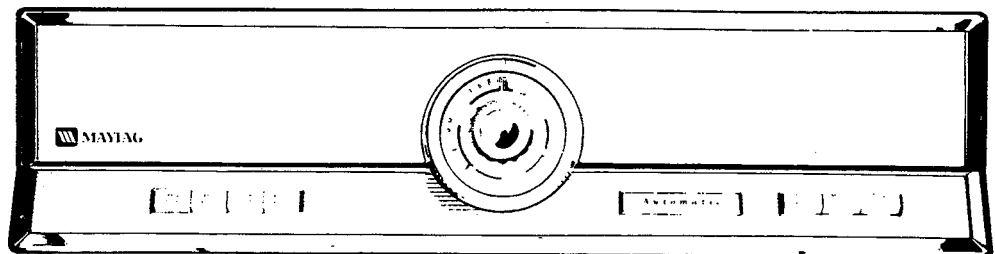
A106



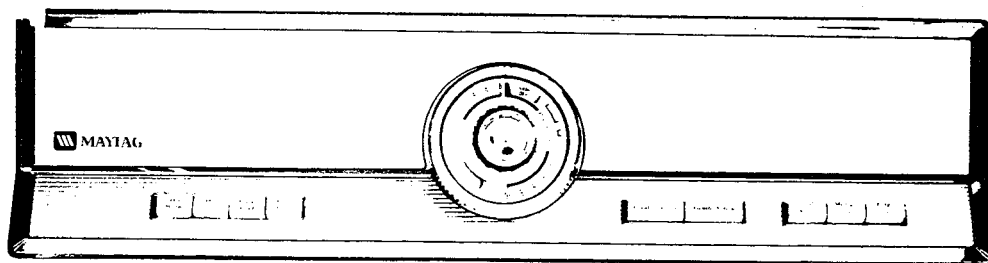
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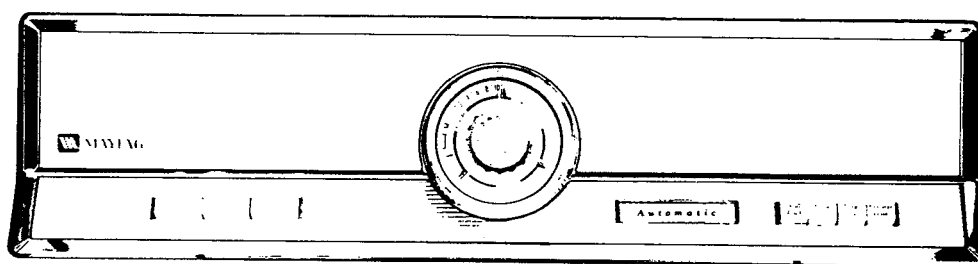
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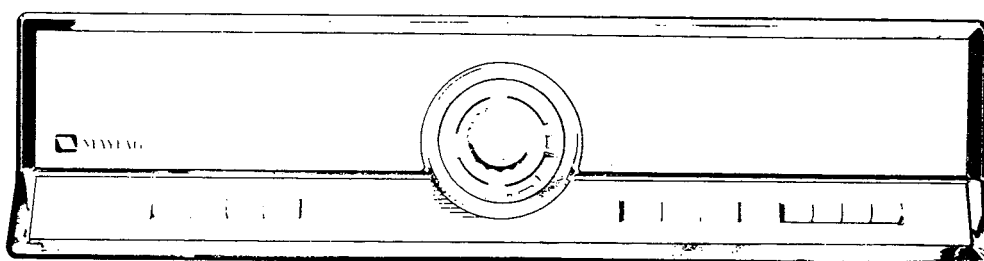
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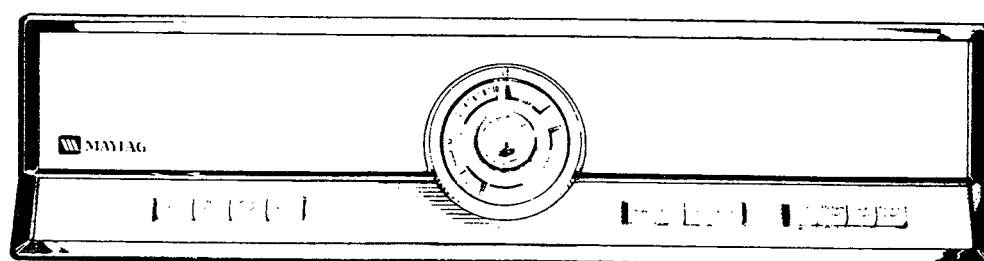
**A308**



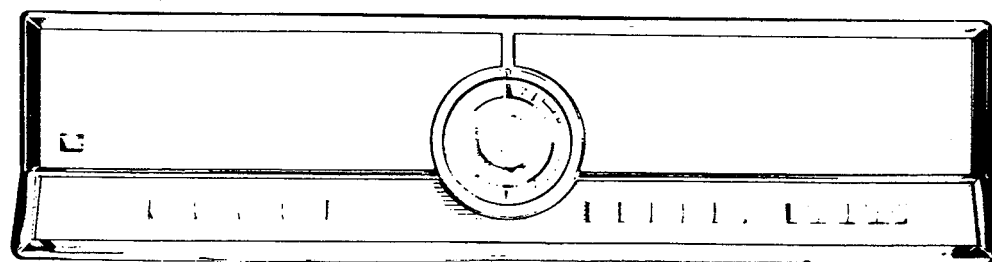
**A408**



**A608**

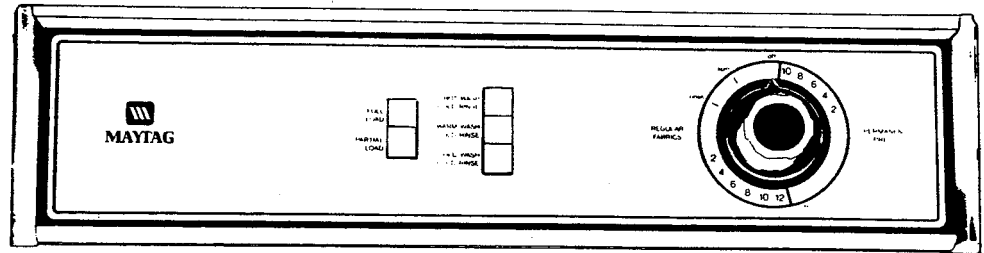


**A806**

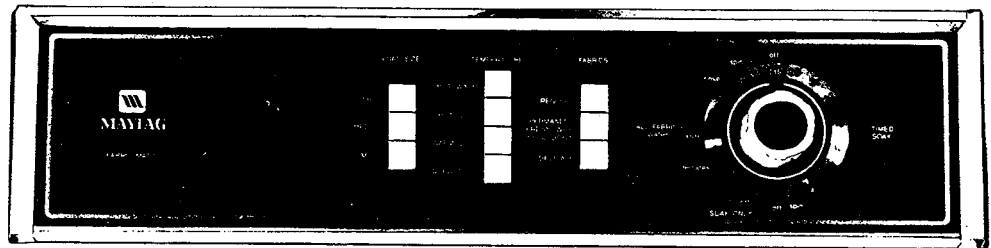


# "10" MODELS

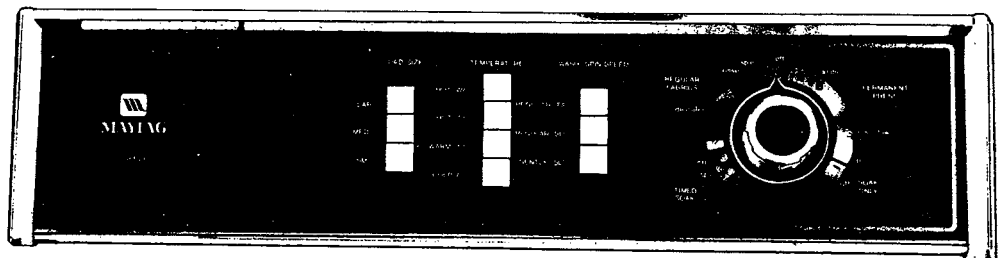
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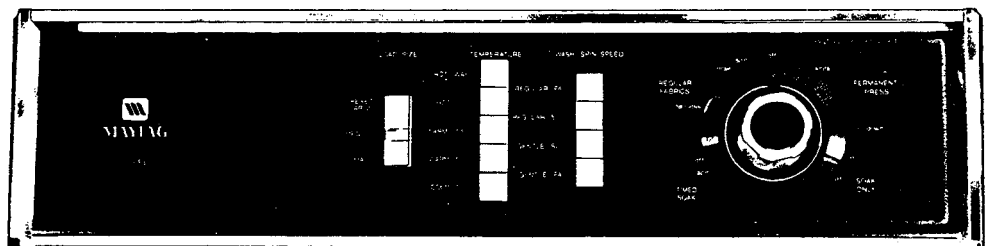
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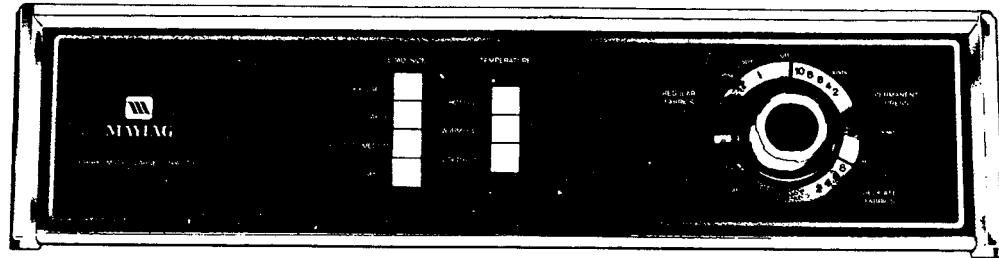
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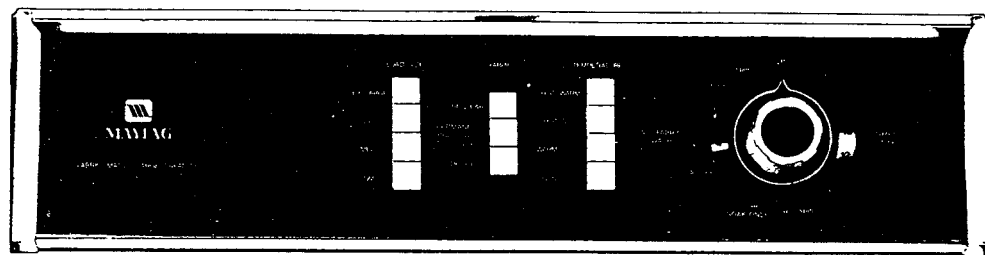
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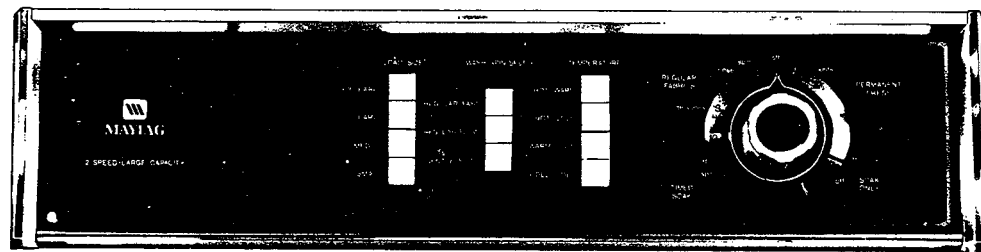
A510



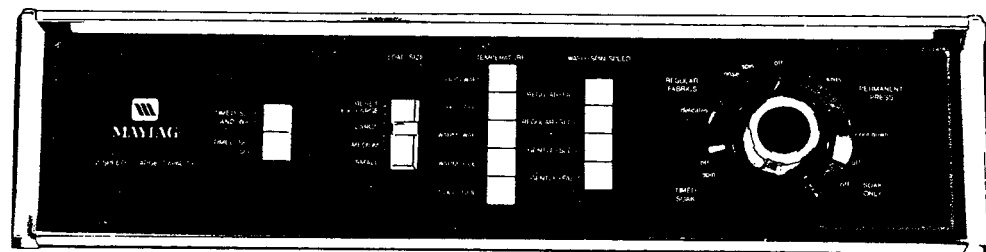
A610



A710

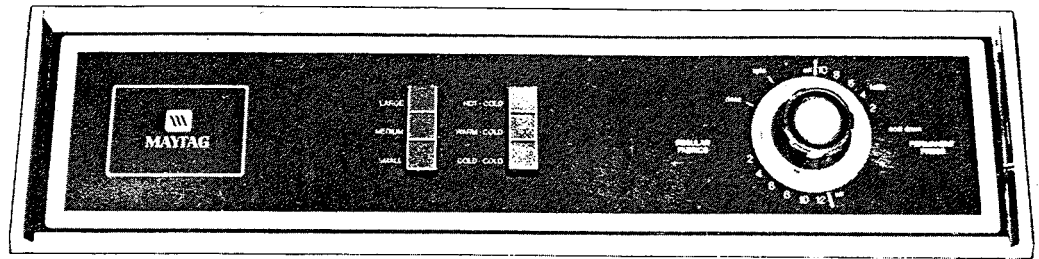


A810

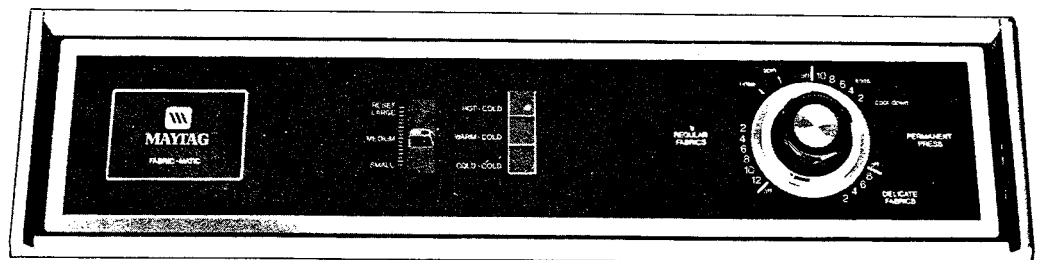


# "12" MODELS

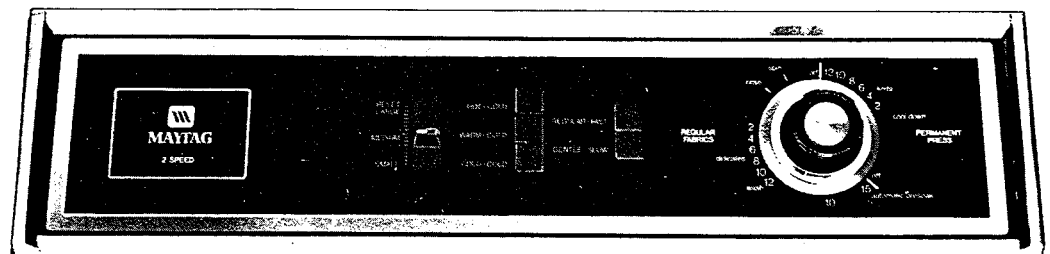
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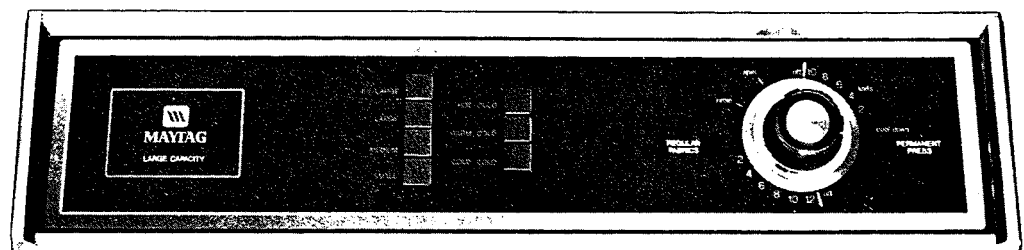
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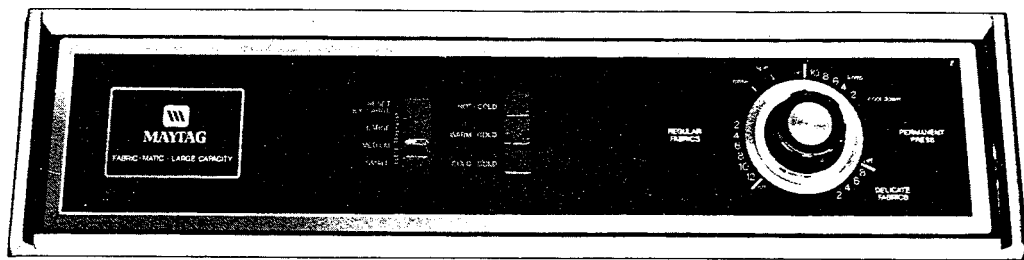
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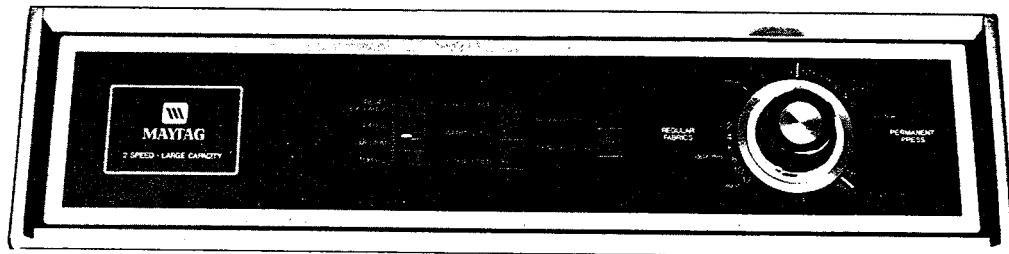
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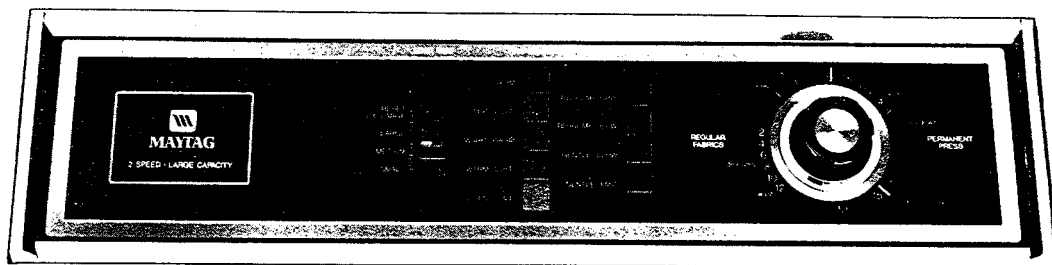
A512



A612



A712



# GENERAL SPECIFICATIONS

## DIMENSIONS

Height to top of cabinet	36"	-	91.4cm
Height to top of control panel	43-1/8"	-	109.5cm
Height (lid open)	51"	-	129.5cm
Width	25-1/2"	-	64.8cm
Depth (including 1-1/2" overhang)	27"	-	68.6cm

## WEIGHT

Crated	- (Approx.) 258 lbs. - 117kg
Uncrated	- (Approx.) 229 lbs. - 104kg

## WATER USAGE

Small	- 20 gallons (16.6 Imp.) (75.7 liters)
Medium	- 27 gallons (22.4 Imp.) (102.2 liters)
Large	- 34 gallons (28.2 Imp.) (128.7 liters)
Extra-Large Models Only	- 40 gallons (33.2 Imp.) (151.4 liters)

## OPERATING SPEED

Regular Action  
Agitation - 63 OPM

Spin - 618 RPM

Gentle Action - (2 Speed Only)

Agitation - 42 OPM

Spin - 412 RPM

## MOTOR

1/3 HP, 120 volt, 60 Hz, reversible, thermoprotected, automatic reset.  
Use standard 15 amp fuse.

## POWER USAGE

From 0.1 to 0.17 KHW per complete cycle depending on load and wash time selected.



# FEATURE CHART

MODEL	Water Temp Comb.	Delicate Cycle	Reg. Cycle	P.P. Cycle	Timed Soak	Soak Only	Lint Filter	Fabric Softner Disp.	Bleach Disp.	Water Levels	Suds Saver Available (-S)	Motor Speed	Tub Size	Pre Wash	Un-Balance Mechanism	Built In Siphon
A106	3		✓	✓			✓	✓		3		1	L		✓	
A106F	3		✓	✓			✓	✓		3		1	L		✓	
A107	3		✓	✓			✓	✓		3	✓	1	L		✓	
A108	4	✓	✓	✓			✓	✓	✓	3	✓	1	L		✓	
A207	3	✓	✓	✓			✓	✓		3	✓	2	L		✓	
A208	4	✓	✓	✓			✓	✓	✓	3	✓	2	L		✓	
A308	3	✓	✓	✓			✓	✓		4	✓	1	XL		✓	
A408	4	✓	✓	✓	✓		✓	✓	✓	4	✓	1	XL		✓	
A608	4	✓	✓	✓		✓	✓	✓	✓	4	✓	2	XL		✓	
A806	5	✓	✓	✓		✓	✓	✓	✓	4	✓	2	XL	1	✓	
A110	3		✓	✓			✓	✓		2		1	L		✓	✓
A209	3	✓	✓	✓			✓	✓		3	✓	1	L		✓	✓
A210	4	✓	✓	✓	✓	✓	✓	✓	✓	3	✓	1	L		✓	✓
A310	4	✓	✓	✓	✓	✓	✓	✓	✓	3	✓	2	L		✓	✓
A410	5	✓	✓	✓	✓	✓	✓	✓	✓	Infinite		2	L		✓	✓
A503	3		✓	✓			✓	✓		4		1	XL		✓	✓
A510	3	✓	✓	✓			✓	✓		4	✓	1	XL		✓	✓
A610	4	✓	✓	✓	✓	✓	✓	✓	✓	4		1	XL		✓	✓
A710	4	✓	✓	✓	✓	✓	✓	✓	✓	4	✓	2	XL		✓	✓
A810	5	✓	✓	✓	✓	✓	✓	✓	✓	Infinite		2	XL		✓	✓
A112	3		✓	✓			✓	✓		3		1	L		✓	✓
A212	3	✓	✓	✓			✓	✓		Infinite	✓	1	L		✓	✓
A312	3	✓	✓	✓	✓		✓	✓	✓	Infinite	✓	2	L		✓	✓
A412	3		✓	✓			✓	✓		4		1	XL		✓	✓
A512	3	✓	✓	✓	✓		✓	✓	✓	Infinite	✓	1	XL		✓	✓
A612	3	✓	✓	✓	✓		✓	✓	✓	Infinite	✓	2	XL		✓	✓
A712	5	✓	✓	✓	✓		✓	✓	✓	Infinite		2	XL		✓	✓

# WARRANTY

## Automatic Washer Warranty

### Full One Year Warranty

For **one (1) year** from the date of original retail purchase, any part which fails in normal home use will be repaired or replaced free of charge. This warranty applies when the appliance is located in the United States or Canada. Appliances located elsewhere are covered by the limited warranties, including parts which fail during the first year.

### Limited Parts Warranty

After the first year from the date of original retail purchase, through the time periods listed below, the designated parts which fail in normal home use will be repaired or replaced free of charge for the part itself, with the owner paying all other costs, including labor.

**Second Year** - all parts; **Third through Fifth Year** - all parts of the transmission assembly (as illustrated).

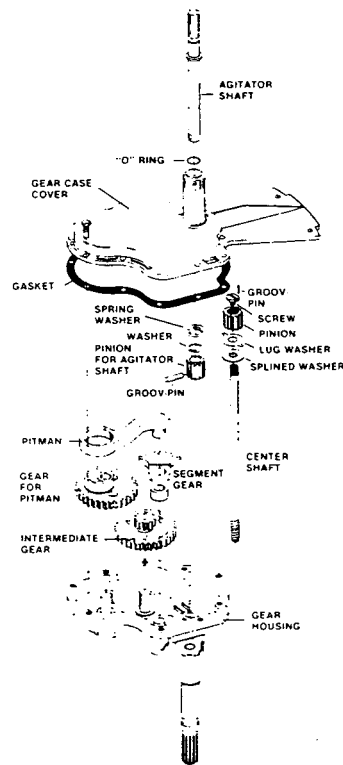
### Additional Limited Warranty Against Rust

Should an exterior cabinet, including the top and lid, rust during the five year period starting from the date of retail purchase, repair or replacement will be made free of charge during the first year. After the first and through the fifth year, repair or replacement will be made free of charge for the part itself, with the owner paying all other costs, including labor.

### How and Where to Receive Warranty Service

- Call or write the authorized Maytag dealer from whom the appliance was purchased or the authorized service firm designated by it.
- If the owner moves from the selling dealer's servicing area after purchase, call or write any authorized Maytag dealer or authorized service firm in or near the new location.
- Should the owner not receive satisfactory warranty service from one of the above, call or write Service Department, The Maytag Company, Newton, Iowa 50208; and arrangements for warranty service will be made.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



 <b>MAYTAG RETURN MATERIAL TAG</b> No. 328305 No. 328305		<b>SEE INSTRUCTIONS ON BACK</b>		<b>PART NO. 2-1805</b>							
		<b>DEALER NAME</b> <b>Cranston Appliance</b>		<b>SERIAL NUMBER</b> <table border="1" style="width: 100%; text-align: center;"> <tr> <td>9</td><td>8</td><td>7</td><td>6</td><td>5</td><td>4</td><td>N</td><td>C</td> </tr> </table>		9	8	7	6	5	4
9	8	7	6	5	4	N	C				
<b>STREET ADDRESS</b> <b>999 Armstrong Drive</b>		<b>MODEL NUMBER</b> <b>A712</b>		<b>LTRS. SERIES</b>							
<b>CITY AND STATE</b> <b>Rockford, Illinois 61107</b>		<b>DATE PURCHASED</b> <b>2-14-84</b>		<b>DATE FAILED</b> <b>10-30-84</b>							
<b>CUSTOMER NAME</b> <b>John Doe</b>		<b>CIRCLE YEAR OF FAILURE:</b> <table style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; border-radius: 50%; padding: 2px;">1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> </tr> </table> <small>(SEE INSTRUCTIONS)</small>		1	2	3	4	5	<input type="checkbox"/> Repair or Exchange — Out of Warranty <input checked="" type="checkbox"/> Replace — In Warranty <input type="checkbox"/> Credit - Replacement Part Purchased on Invoice No.		
1	2	3	4	5							
<b>STREET ADDRESS</b> <b>1 B&amp;R Parkway</b>		<b>REASON FOR RETURN—BE SPECIFIC—</b> <b>Motor Failure</b>									
<b>CITY AND STATE</b> <b>Rockford, Illinois 61108</b>											

**EXAMPLE OF RETURN MATERIAL TAG COMPLETED FOR PART RETURNED FOR IN-WARRANTY REPLACEMENT.**

## REPLACEMENT POLICY ON REPAIR PARTS

It is Maytag's policy to replace no charge any defective, genuine replacement parts for one year from the date the part is replaced or for the balance of the original product warranty, whichever is greater. For example, if the 2-10315 pinion is replaced in an automatic washer transmission two years after the date the washer was sold, the replacement pinion would be covered by this policy for three years, the balance of the original warranty on the transmission. If the 2-10315 pinion is replaced four and one-half years after the date the washer was sold, the replacement pinion is covered by this policy for one full year from the date the part is installed. This policy applies only to the cost of the part itself, not to labor or transportation costs.

Return any defective parts to your regular Maytag parts source for replacement within 30 days from the date of failure. Tag each part returned with a completed Maytag Return Material Tag. (See above.) Replacements may also be purchased in advance and the defective parts returned within 30 days for credit. If credit is requested, list the invoice number on which the replacement part was purchased in the space provided on the Return Material Tag.

Transportation on replacement parts is F.O.B. Maytag parts source.

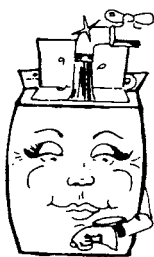
# PREINSTALLATION CONSIDERATIONS

## ELECTRICAL SERVICE

15 amp fuse or comparable circuit breaker.

DO NOT OPERATE WASHER ON "DROP CORDS", OVERLOADED CIRCUITS.

## WATER PRESSURE



Water pressure of 30-120 p.s.i. is required to correctly fill the washer to the proper levels. Pressures of less than 30 p.s.i. may cause an extended or exceptionally long fill time.

Water inlet hoses packed with the washer are 5' long. If longer or extension hoses are needed, these are available through The Maytag Company.

TO AVOID THE POSSIBILITY OF WATER DAMAGE, SHOULD A HOSE LEAK, ALWAYS HAVE FAUCETS ACCESSIBLE AND TURN OFF FAUCETS WHEN WASHER IS NOT IN USE.

## WATER TEMPERATURE

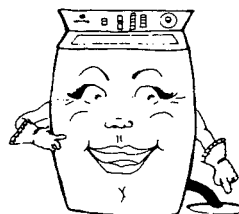
**COLD-** Same as cold water faucets deliver.

**HOT-** Same as hot water faucets deliver.

**WARM-** Any warm setting may vary in temperature depending on existing temperatures of the hot and cold water. Warm water is also a mixture based upon the pressure of both hot and cold water supplies. This means warm water temperature is NOT thermostatically controlled and can vary in temperature range. Normal warm water temperature variations do, however, provide good washability in normal laundering situations.

## DRAIN FACILITIES

### STANDARD MODELS



These models are equipped with a built-in siphon break which automatically elevates the drain hose to the proper height. The drain hose should be installed into a standpipe, which must

be large enough to accept a 1-1/2" outside diameter drain hose, or extended to a floor facility.

### SUDS SAVER & ALL "08" MODELS

These models are not equipped with a siphon break and must be elevated to a height of 36". Preferably a 36" high standpipe is recommended. For installations where the drain hose cannot be conveniently elevated to 36" an accessory 2-1112 siphon break is available. WITHOUT THE 36" HIGH ELEVATION OR A SIPHON BREAK, WATER MAY RUN OUT OF THE WASHER PREMATURELY. If the washer fills and drains at the same time this would indicate that the drain hose has not been elevated to the proper height. Drain facilities must be capable of handling a 1-1/2" outside diameter drain hose.

### ALL MODELS

**NOTE:** Caution must always be exercised to avoid "kinking" the drain hose. For best performance the drain hose should not be restricted in any way, through elbows, couplings or excessive lengths. All unnecessary drain hose should be cut off to avoid restrictions.

## FLOORING

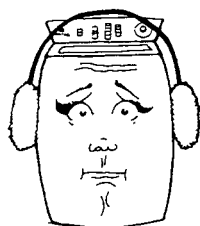


For best performance washer must be installed on a solid floor. Wood floor constructions may sometimes need to be reinforced to minimize vibration from unbalanced load situations. Carpets and soft tile surfaces are also

contributing factors in vibration and/or tendency for a washer to move slightly during spin cycle. A special carpet installation kit is available as an accessory (Maytag Part No. 2-4986) to provide a solid base for each leveling leg. It is composed of four small, steel plates which can be "nailed" to a wooden, carpeted floor. These plates will reduce vibration between leveling leg of washer and floor surface.

Never install washer on a platform or weak support structure.

## TEMPERATURE CONSIDERATIONS



Since the washer will always maintain some water in the water valve, pump and hose areas, it is recommended the washer never be installed in areas where water may freeze. This can cause damage to belts, pump, hoses and other components.

## COLD WEATHER STORAGE

If a washer is to be stored where it would be subject to freezing conditions the following precautions should be taken:

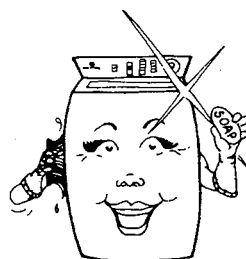
1. Turn off water supply, remove and drain inlet hoses.
2. Set timer to a fill cycle and energize water valve by depressing a warm water setting. A few seconds is sufficient.
3. Remove water from drain hose and pump.

## THINGS TO REMEMBER

### A. LUBRICATION

No routine lubrication or adjustments are required to maintain this product. This does not mean the product will never need attention. In the event something does need attention please contact an authorized Maytag dealer.

### B. FINISH



All the cabinetry and external finishes are protected against rust to keep the product looking well for many years. As with any other piece of equipment, cleaning and waxing maintains the beauty of these finishes.

**Caution:** If "spilled" or used improperly, bleaches and other strong laundering chemicals can permanently spot or stain finishes unless wiped off immediately.

The top cover, lid and inner tub of washer have a porcelain enamel finish. Since porcelain is actually "glass" which is bonded to metal, it is very dur-

able. However, care should be exercised to avoid damage by sharp blows from objects or tools used around and in the product. Porcelain can be chipped.

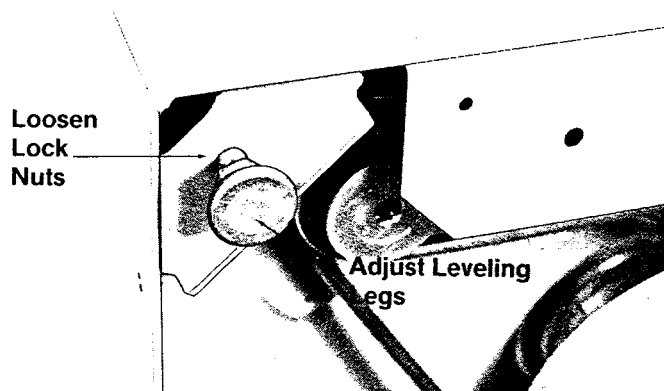
### C. WATER DAMAGE FROM FLOODING

In the event the washer should be exposed to water from basement flood-

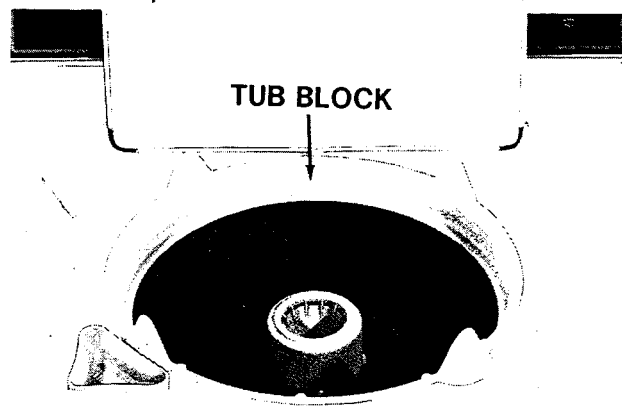
ing, call your Maytag dealer for proper maintenance attention before using. **Always unplug product and have a qualified technician inspect appliance before any attempt is made to operate the unit. Never wash product inside and out with a garden hose or pressure cleaning system.**

## INSTALLATION

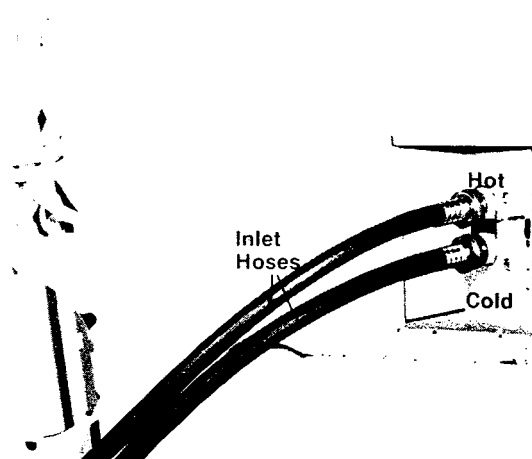
Loosen leveling leg lock nuts. Adjust rear legs so that washer can set as low as possible to floor. Do not tighten lock nuts until washer has been leveled and in position where it will stay. Install all four rubber feet.



Set washer in upright position. Remove tape from lid. Open lid and take out tub block.



Connect water inlet hoses to water valve using plain seal washers.

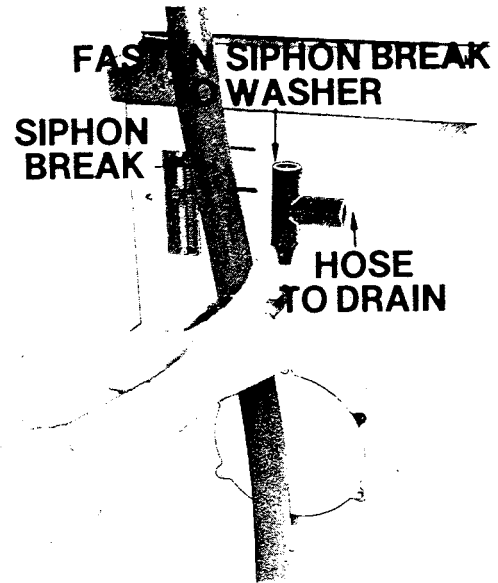
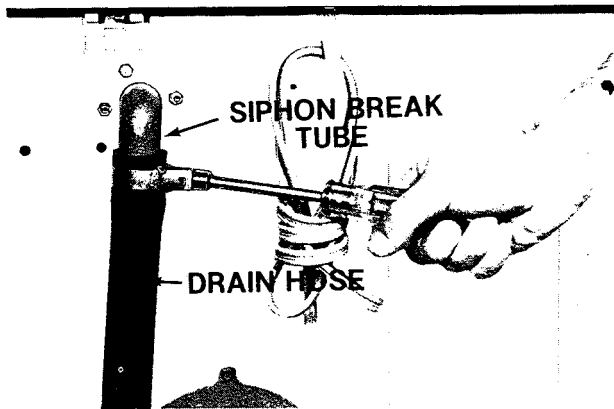


When connecting inlet hoses to the water valve be sure hose connectors are not cross-threaded on water valve. Tighten securely by hand plus 1/4 turn, with pliers. Do not overtighten as this can strip threads on water valve.

Move washer into position. Insert filter screen washers into inlet hoses and connect inlet hoses to hot and cold faucets. If necessary longer inlet hoses are available up to 10 feet.

## STANDARD MODELS

Install drain hose and clamp over siphon break tube on back of washer. Tighten clamp securely. A 4' drain hose is provided with the washer.



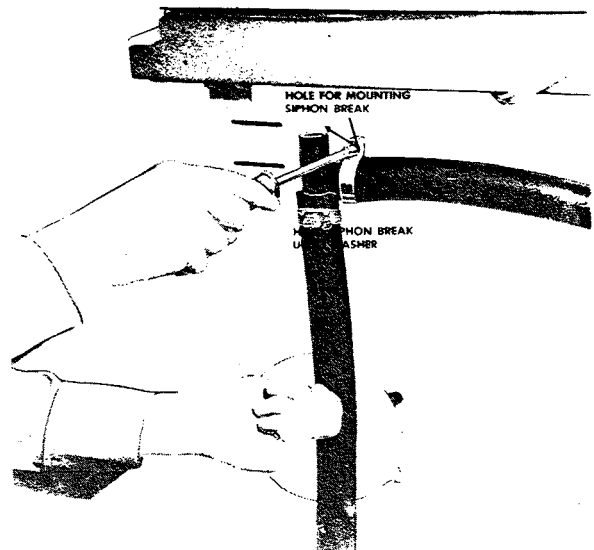
2. Mount the siphon break and drain hose going to drain facility as shown by securing hose clamp screw through the hole provided at the left side of the back panel.

## "08" & ALL SUDS SAVER MODELS

When installing the drain hose, the hose must be elevated. This can be done by placing the drain hose in a standpipe no less than 36" high. The inside diameter of the standpipe should be no less than 1-1/2". Always avoid a tight fit between the drain hose and standpipe to prevent the chance of siphoning water from the washer. The end of the drain hose must always be above the maximum water level in the washer.

If a 36" standpipe is not available, a 2-1112 siphon break (accessory) should be installed. With a siphon break the drain hose can go into a low standpipe or into a floor drain. To install the siphon break:

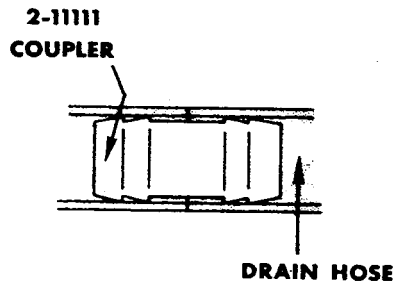
1. Hold the siphon break in place and cut the drain hose. Assemble the drain hose to the siphon break with clamp as shown. The closed end of the siphon break should point up.



**All models** - when the drain hose is placed into the standpipe there **must not** be a lot of excessive hose left over which is allowed to loop around on the floor. This condition can cause a kinked drain hose resulting in slow draining. **REMOVE EXCESS DRAIN HOSE.**

If it is necessary to extend the drain hose from the siphon break to the drain facility, attach the extension hose sections to the

siphon break. Use 2-11111 coupler to connect extension and drain hoses. Do not extend "gooseneck" end.

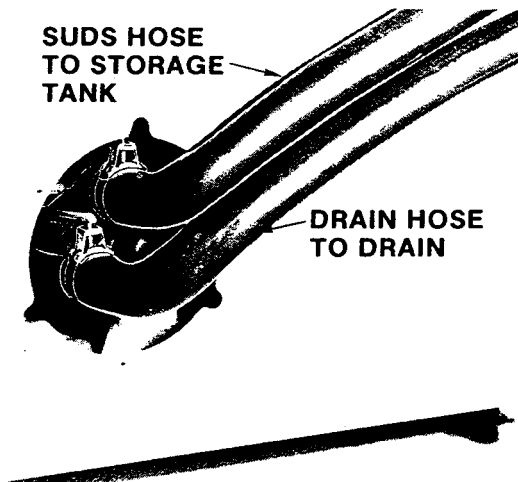


If the drain hose is to be shortened, cut hose behind the gooseneck. Remove as much as necessary. Use 2-11111 accessory coupler to splice gooseneck to hose. Do not cut "gooseneck" end off.

When used properly, hose clamps are not required. With the excess section of the hose removed, join the two ends using the coupler. Be sure each section of hose is securely pushed over the end of the coupler and the hoses joined at approximately the middle of the coupler.

## SUDS SAVER ONLY

Install and clamp suds hose (hose with long gooseneck) at top diverter valve outlet, and drain hose (hose with short gooseneck) at bottom diverter valve outlet. Follow drain hose installation procedures on 5-14 for the bottom hose.



For Suds Saver Models, the storage tank should have at least a 21 gallon storage capacity. Place suds hose in storage tank. The suds hose must reach to the bottom of the container. The hose end should be cut at an angle to prevent sediment from being drawn back into the washtub.

When installing a Suds Saver Model be sure the suds hose does not sag. The suds hose should be on a straight line to the storage container. It is recommended that the suds hose be secured to the storage container to eliminate the hose from coming out of the container as a result of water being expelled.

With water and drain utilities connected, level the washer by turning the leveling legs in or out as necessary. Once the legs have been adjusted, the washer level and setting firmly on all legs, tighten leveling leg lock nuts against the leg supports on the base.

## ELECTRICAL REQUIREMENTS

### OBSERVE ALL NATIONAL ELECTRICAL CODES AND LOCAL CODES & ORDINANCES

### ELECTRICAL SERVICE — 120 VOLTS, 60 HZ ONLY

A 120 volt, 60 Hz, 15 ampere fused electrical supply is required. An individual branch (or separate circuit serving only this appliance is recommended.) **DO NOT USE AN EXTENSION CORD** unless it meets all requirements as outlined for grounding, polarizing (3-wire) and capacity. Wire size should be at least No. 14.

**BEFORE PLUGGING IN POWER CORD, OPERATING OR TESTING, follow grounding instructions in Grounding Section.**



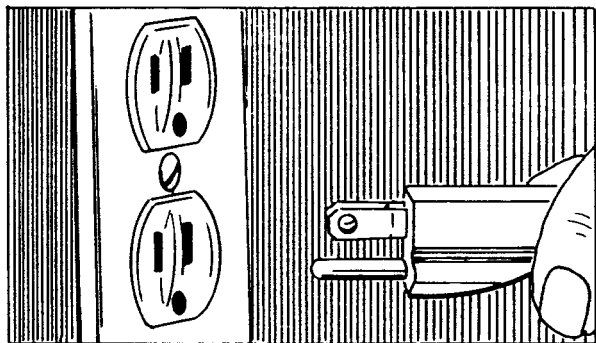
## GROUNDING — 120 VOLTS, 60 HZ

### IMPORTANT SAFETY PRECAUTIONS

**WARNING** - To prevent unnecessary risk of fire, electrical shock or personal injury, all wiring and grounding must be done in accordance with the National Electrical Code and local codes and ordinances. It is the personal responsibility and obligation of the appliance owner to provide adequate electrical service for this appliance.

### ELECTRICAL GROUND IS RE- QUIRED ON THIS APPLIANCE

This appliance is equipped with a power supply cord having a 3-prong grounding plug. For your safety, this cord must be plugged into a mating 3 prong type wall receptacle which is properly wired, grounded and polarized.



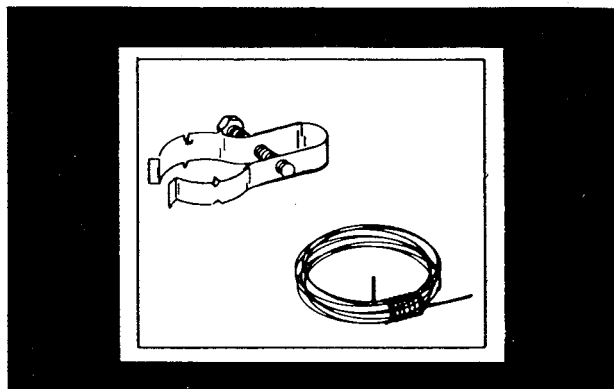
If a mating wall receptacle is not available. Contact a qualified electrician to have the wall receptacle replaced. If there is any question, local building officials or electrical utility should be consulted.

**DO NOT UNDER ANY CIRCUMSTANCES, REMOVE THE ROUND GROUNDING PRONG FROM POWER SUPPLY CORD.**

### ADDITIONAL GROUND PROCEDURE — WHERE LOCAL CODE PERMITS

An external ground wire, clamp and screws are provided for assistance in meeting local

codes. Where approved, it is recommended this additional ground be installed. A proper external ground **MUST** be determined prior to wire hookup. Consult local building officials and qualified electrician in the event any questions exist.



**ALL GROUNDING AND WIRING MUST BE DONE IN ACCORDANCE WITH NATIONAL AND LOCAL CODES.**

## ELECTRICAL SERVICE — 50 HZ

Products manufactured for 120 volt, 50 Hz or 230 volt, 50 Hz, must be used on the voltage and frequency it was designed for. It should be operated on an individual branch circuit and fused by no less than 15 ampere fuse or circuit breaker. Export models may require the addition of a plug on the power cord. It is the responsibility of owner to insure wiring of power cord and receptacle has been done properly. Consult local utility or qualified electrician.

## GROUNDING — 50 HZ

### IMPORTANT SAFETY PRECAUTIONS

**WARNING** - To prevent unnecessary risk of fire, electrical shock or personal injury, all wiring and grounding must be done in accordance with local electrical codes.

### ELECTRICAL GROUND IS REQUIRED ON THIS APPLIANCE.

Due to variation of electrical services overseas, specific grounding instructions must be determined by the owner and at the point of installation.

An external ground wire, clamp and screws are provided for assistance in meeting local codes. Where permitted by local code, use these as additional grounding provisions.

Consult local utility or qualified electrician before all ground connections are made. **DO NOT** plug in, operate or test appliance until proper instruction is obtained and the appliance has been properly grounded.

# INSTALLATION CHECK LIST

**Tub block and instruction package have been removed from tub.**

**Agitator is pushed all the way down and snapped into place on agitator shaft.**

**Washer is plugged into electrical outlet and is properly grounded.**

Water is turned on and checked for leaks at faucet and water valve.

Drain hose is properly located into drain facility and is not kinked.

Washer has been leveled with all legs firmly on the floor and leveling leg lock nuts have been tightened.

Washer operates properly.

Fill - check correct water temperature.

Agitate - after washer has filled.

Spin - water all out before spray rinse.

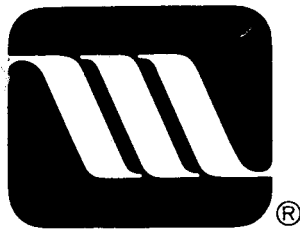
Make any corrections necessary to properly complete the installation.







MAYTAG



# Let's Talk Service

July-August 1989 • Vol. 36 • No. 7-8

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## ***SOMETHING SPECIAL FROM MAYTAG!***

*This issue of LET'S TALK SERVICE is dedicated entirely to a new washer transmission.*

*We have set up this issue so this information may be easily removed and utilized as a service manual supplement.*

*So let's turn to page 57 and see this "Something Special From Maytag!"*

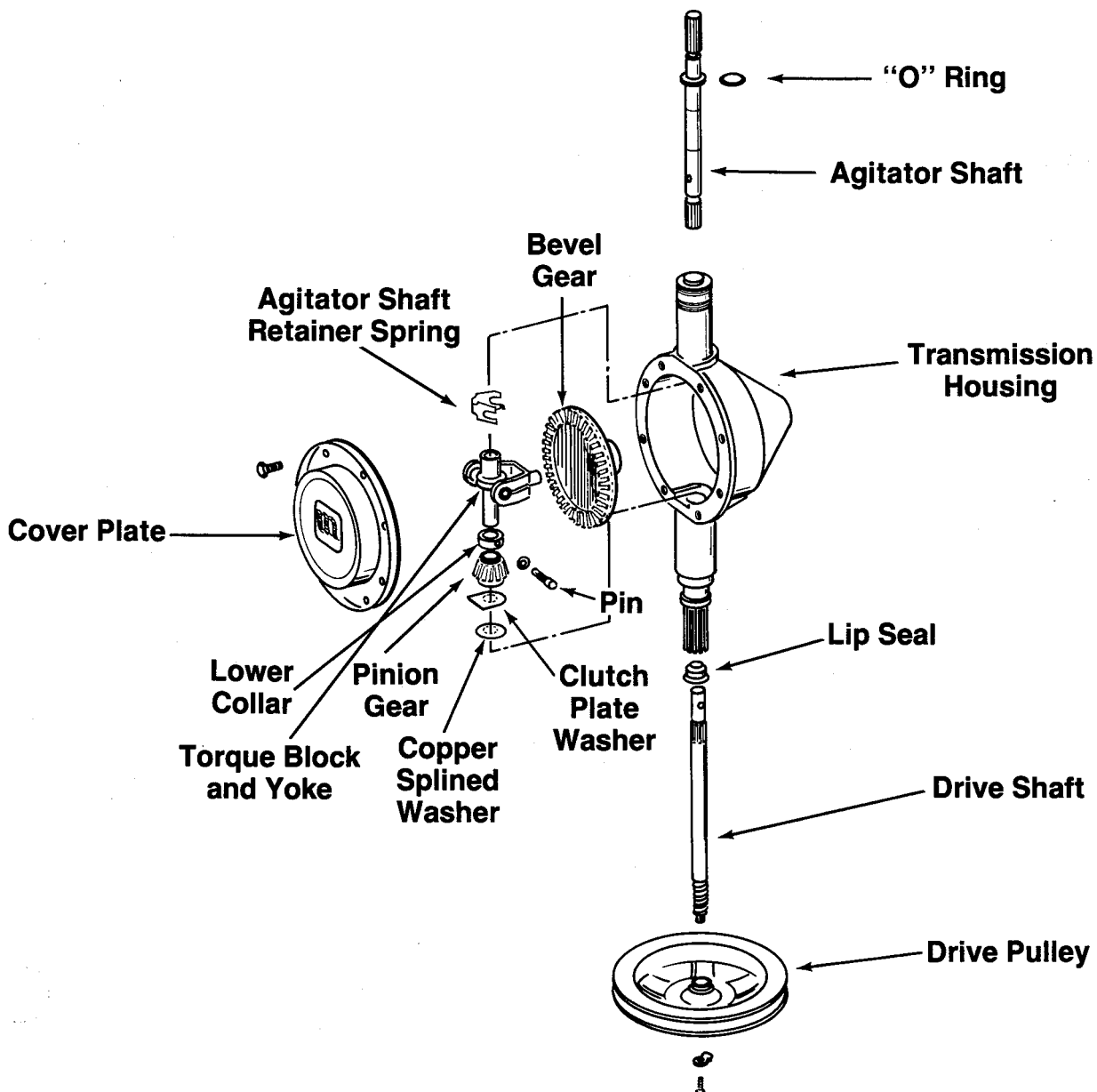
# ***NEW TRANSMISSION!!!***

**Now being used in all Maytag washer models  
.....Also includes the S1000!**

*With July 1989 production, Maytag began using a new style transmission and agitator in current production Maytag washers and S1000.*

*This new transmission is much more simplified, making it easier to service. In addition, extensive field testing has proven it a more reliable transmission.*

*The transmission has only four main components; a small pinion gear, torque block, yoke assembly and a large bevel gear. These components are shown in the exploded view drawing.*



*With an easy to remove transmission cover, parts replacement can be done without removing the transmission from the washer. **Therefore, you will no longer replace the entire transmission assembly. Any component failure internally must be replaced as needed.***

*Washing results are virtually the same as before. Although the agitation stroke is much shorter, the oscillations per minute are higher to get the same wash action. There are 150 oscillations per minute on Fabric-matic and single speed models. On two speed models, there are 100 oscillations per minute on slower speed. However, the outer edge of the agitation fin moves through the water at exactly the same speed as it did with the previous transmission.*

#### **NEW STYLE AGITATOR INCLUDED WITH THIS CHANGE**

*The agitator design has been changed to accommodate the differed wash action and assure the same wash results. The original fins have been made smaller with additional small fins added to the agitator base and barrel.*

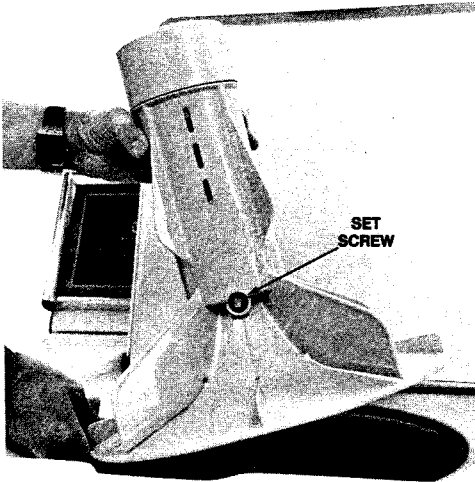
*This issue of Let's Talk Service is dedicated to this major change. Included, are disassembly and service procedures. They should be carefully reviewed.*

*Parts information is also attached to this issue.*

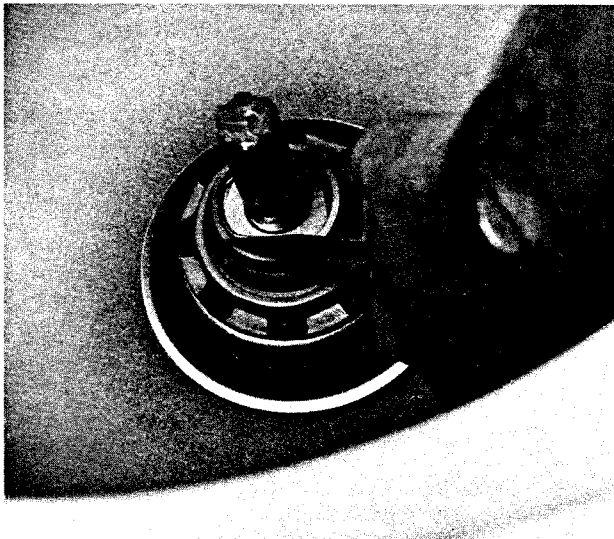


## Orbital Transmission Repair Procedure...

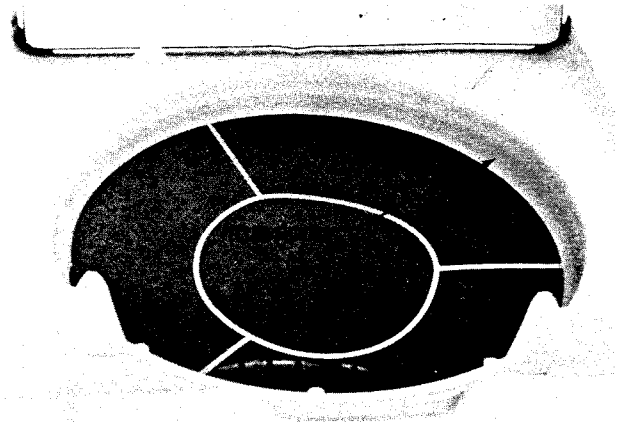
1. Loosen the set screw in the agitator and remove.



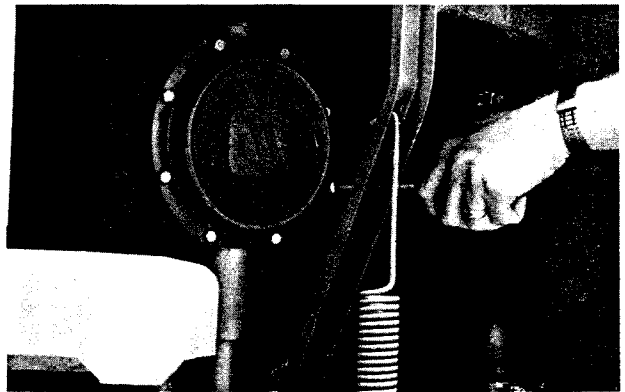
2. Remove the retaining washer and seal. These components are located in the top of the mounting stem and are easily removed with a screwdriver. Use the hook end of lock ring to remove the seal.



3. Place the tub block in the tub.

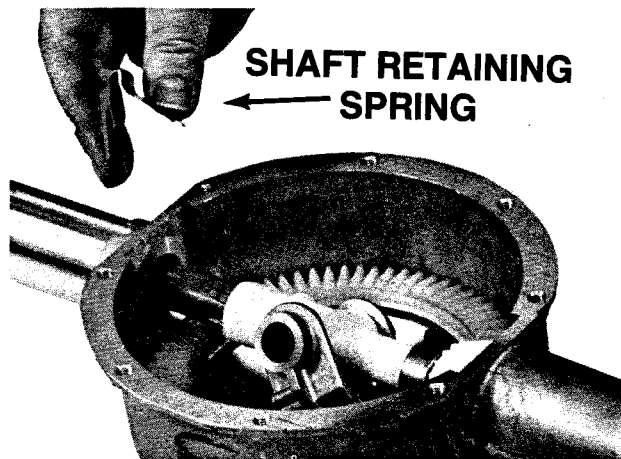


4. Remove the front panel.
5. Lay the washer on its back and remove the belts.
6. Place an oil catch pan under the center hub of the transmission.
7. Remove the eight (8) hex head bolts with a 7/16 nut driver. Be sure the bolt heads are facing up. This will insure that you will not get oil all over the back of the washer should the cover come loose.

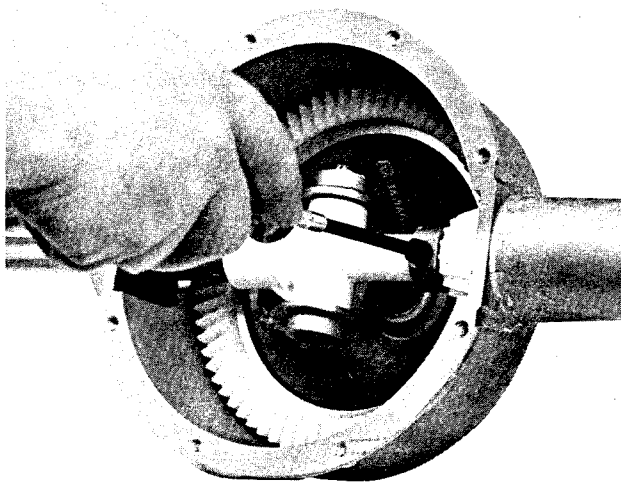


8. Remove the cover plate. (It may be necessary to pry the plate off with a screwdriver.) Carefully rotate the transmission dumping the oil into your catch pan.

9. Remove the agitator shaft retaining spring by pushing in and lifting off of agitator shaft. Care should be taken when removing.



10. Remove the lower collar pin with an Allen wrench.

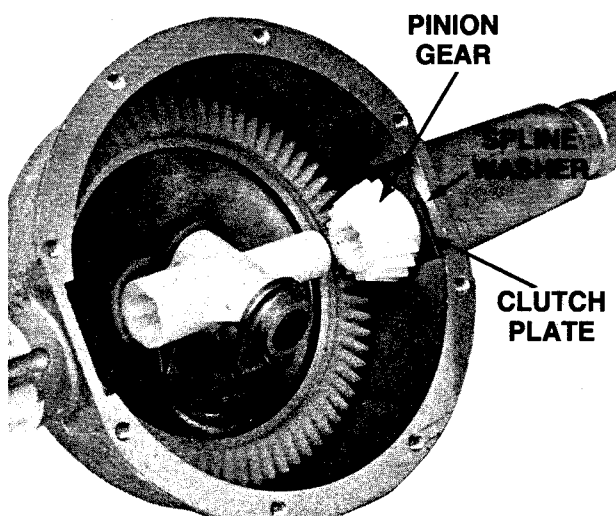


11. Grasp the drive pulley and slowly pull the center shaft out. Only a small amount of force will be needed to remove the shaft. Be careful not to damage the lip seal at the bottom of the transmission.

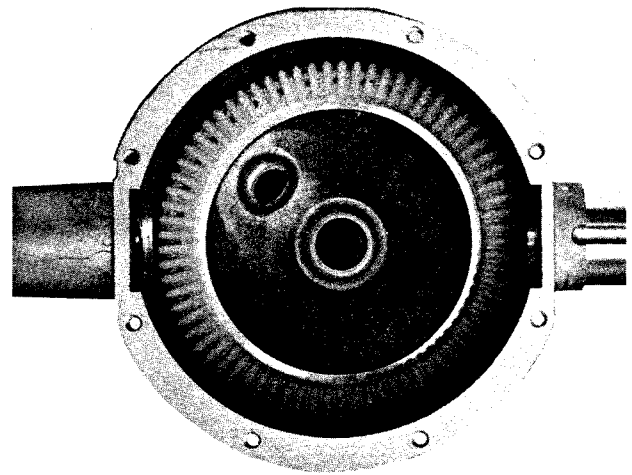
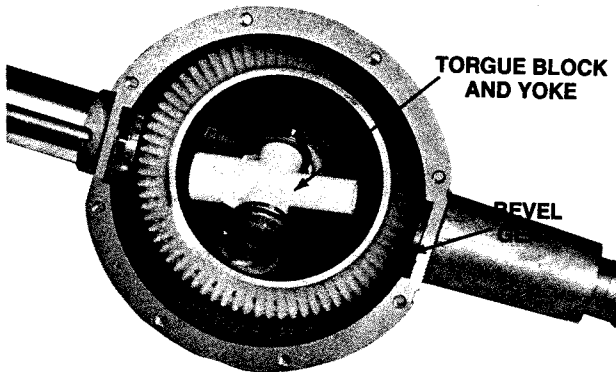
12. Pull the agitator shaft out through the tub. Remove "O" ring from shaft.



13. With the agitator and drive shafts removed, simply lift out the following parts: lower collar, pinion gear; followed by the clutch plate and splined washer, which are both located behind the pinion gear.



14. The torque block and yoke can now be removed, as can the bevel gear. Underneath the bevel gear is a spacer washer. Remove it.

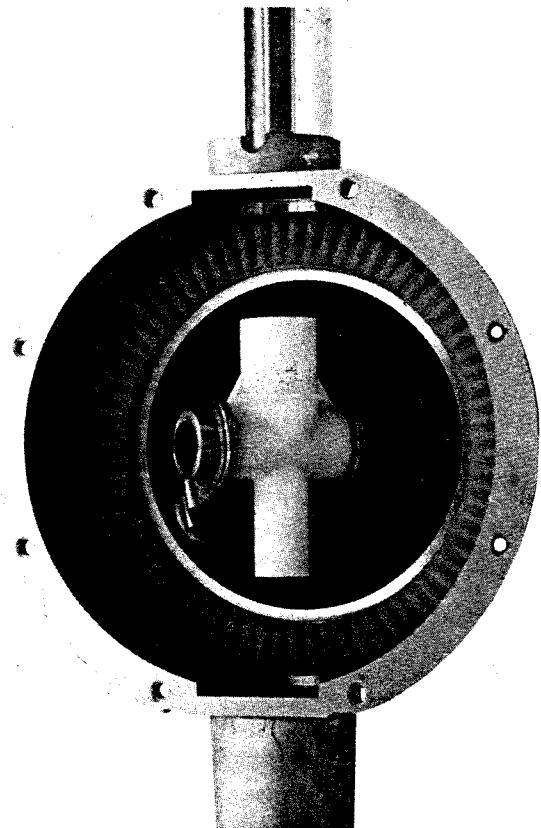
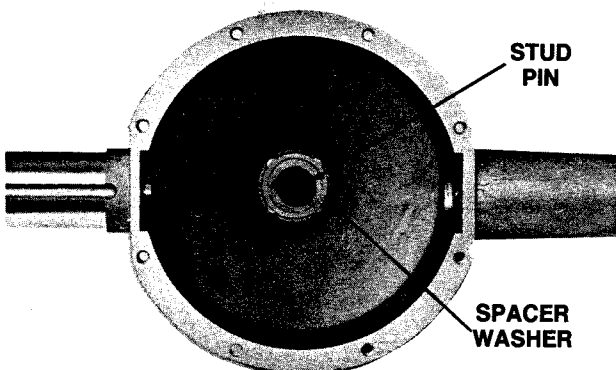


15. At this point all components to be re-assembled should be cleaned. Also, clean any silastic from the transmission housing and cover before re-assembling.

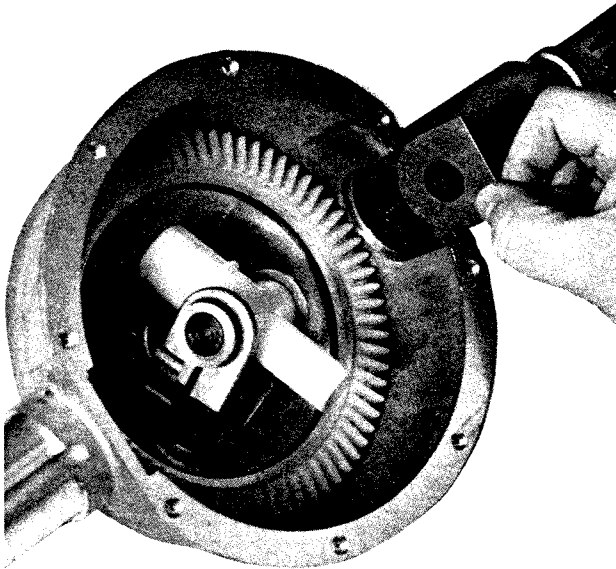
2. Place pivot stud and torque block into the hole in the bevel gear. Point the unsplined portion of the yoke towards the bottom of the washer.

### Reassembly Procedures:

1. Install spacer washer, followed by the bevel gear on the center stud pin.

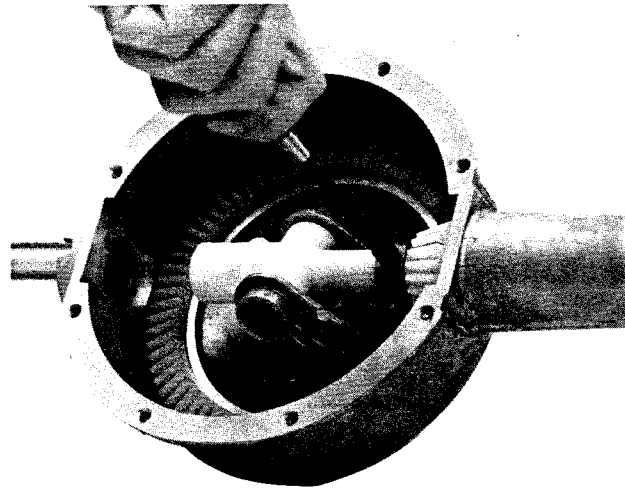


3. Place the copper splined washer on the bottom and clutch plate washer on top and lay them in the slot as shown.

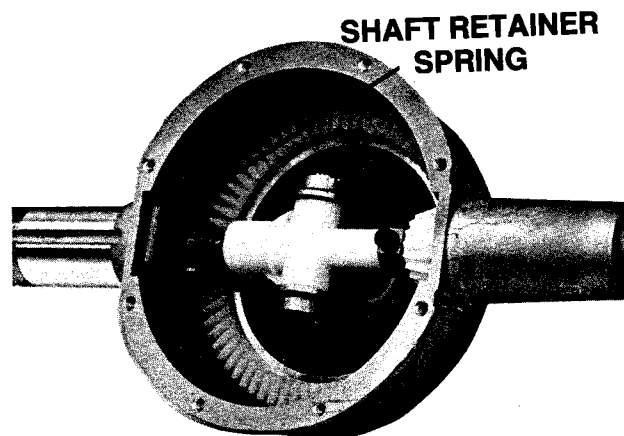


4. Place the pinion in line with the drive shaft hole then push the drive shaft through the various components until it is flush with the pinion gear. Some minor twisting of the shaft will be required in order to line up all of the splines.
5. Now place the round, lower lock collar between the unsplined portion of the yoke and pinion gear. Push the shaft into the smaller unsplined portion of the torque block and yoke.

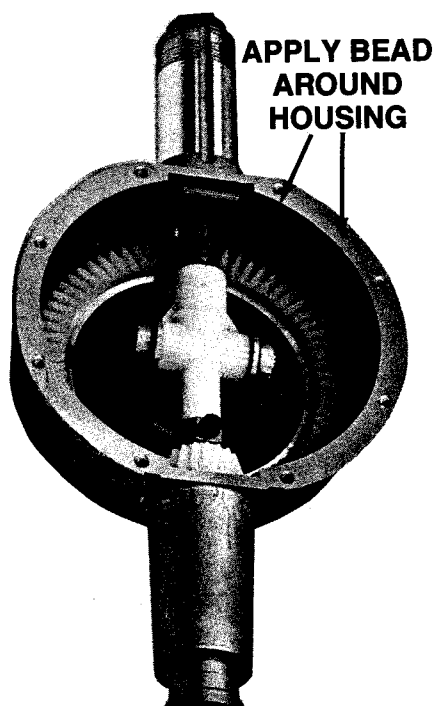
6. With all of the parts of this segment aligned and in place, install the pin for lock collar and tighten.



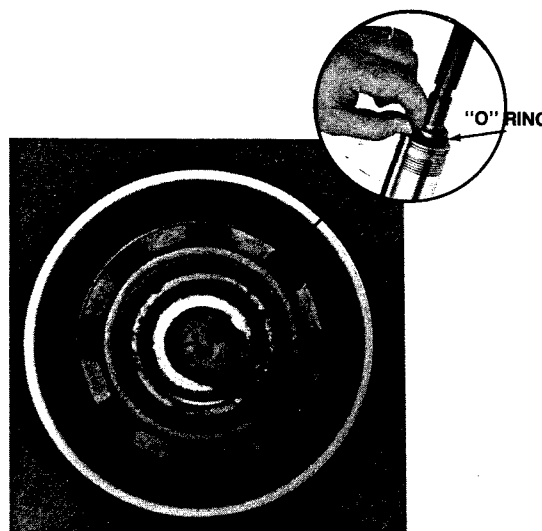
7. Insert the agitator shaft in through the top of the transmission housing. Align the splines and push together.
8. Place the agitator shaft spring into the groove portion of the agitator shaft. Squeezing the spring together will be required before it can be inserted into the groove.



9. Rotate the drive gear (counter clockwise) to check the transmission for proper operation.
10. Apply a new bead of silastic to the edge of the transmission housing. Fill with Maytag transmission oil Part No. 56080.



11. Place the cover on the housing. Insert the eight (8) bolts and tighten. Be sure not to over tighten these eight (8) bolts so as to prevent stripping the threads.
12. Reinstall the belts and front panel. Place washer upright and remove the tub block.
13. Insert the "O" ring over the agitator shaft. With the use of two screwdrivers work the "O" ring over the collar and back into the "V" groove.



14. Install seal, retaining washer and lock ring into the mounting stem.
15. Reinstall agitator and lock in place by tightening set screw.
16. Reinstall washer, level and check for proper operation.