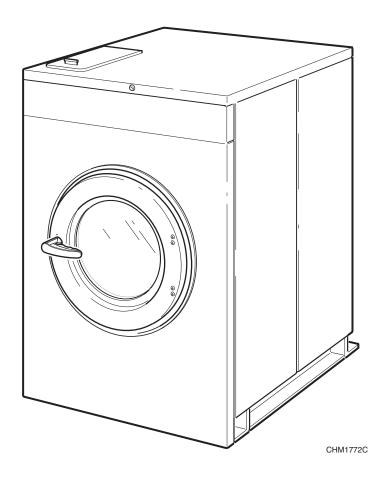
# Washer-Extractor

# Cabinet Hardmount

Refer to Page 8 for Model Numbers





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## **Safety Information**

#### **Explanation of Safety Messages**

Throughout this manual and on machine decals, you will find precautionary statements ("DANGER," "WARNING," and "CAUTION") followed by specific instructions. These precautions are intended for the personal safety of the operator, user, servicer, and those maintaining the machine.



#### **DANGER**

Danger indicates the presence of a hazard that will cause severe personal injury, death or substantial property damage if the danger is ignored.



#### WARNING

Warning indicates the presence of a hazard that can cause severe personal injury, death or substantial property damage if the warning is ignored.



### **CAUTION**

Caution indicates the presence of a hazard that will or can cause minor personal injury or property damage if the caution is ignored.

Additional precautionary statements ("IMPORTANT" and "NOTE") are followed by specific instructions.

IMPORTANT: The word "IMPORTANT" is used to inform the reader of specific procedures where minor machine damage will occur if the procedure is not followed.

NOTE: The word "NOTE" is used to communicate installation, operation, maintenance or servicing information that is important but not hazard related.

#### **General Safety Precautions**

In the interest of safety, some general precautions relating to the operation of this machine follow.



#### **WARNING**

- Failure to install, maintain and/or operate this product according to the manufacturer's instructions may result in conditions which can produce serious injury, death and/or property damage.
- Do not repair or replace any part of the product or attempt any servicing unless specifically recommended or published in this Service Manual and unless you understand and have the skills to carry out the servicing.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the product is properly grounded and to reduce the risk of fire, electric shock, serious injury or death.

W006R2



## **WARNING**

To reduce the risk of electric shock, fire, explosion, serious injury or death:

- Disconnect electric power to the washer-extractor before servicing.
- Never start the washer-extractor with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer-extractor is properly grounded.

W460



#### WARNING

Repairs that are made to your products by unqualified persons can result in hazards due to improper assembly or adjustments subjecting you, or the inexperienced person making such repairs, to the risk of serious injury, electrical shock, or death.

W007



#### **WARNING**

If you or an unqualified person perform service on your product, you must assume the responsibility for any personal injury or property damage which may result. The manufacturer will not be responsible for any injury or property damage arising from improper service and/or service procedures.

W008

Always contact your dealer, distributor, service agent or the manufacturer about any problems or conditions you do not understand.

## **Important Safety Instructions**



#### **WARNING**

To reduce the risk of fire, electric shock, serious injury or death to persons when using your washer, follow these basic precautions:

W023

- 1. Read all instructions before using the washer.
- 2. Refer to the GROUNDING INSTRUCTIONS in the INSTALLATION manual (supplied with your washer) for the proper grounding of the washer.
- 3. Do not wash textiles that have been previously cleaned in, washed in, soaked in or spotted with gasoline, kerosene, waxes, cooking oils, drycleaning solvents or other flammable or explosive substances. They give off vapors that could ignite or explode.
- 4. Do not add gasoline, dry-cleaning solvents or other flammable or explosive substances to the wash water. These substances give off vapors that could ignite or explode.
- 5. Under certain conditions, hydrogen gas may be produced in a hot water system that has not been used for two weeks or more. HYDROGEN GAS IS EXPLOSIVE. If the hot water system has not been used for such a period, before using a washer, turn on all hot water faucets and let the water flow from each for several minutes. This will release any accumulated hydrogen gas. The gas is flammable. Do not smoke or use an open flame during this time.

- 6. Do not allow children to play on or in a washer. Close supervision of children is necessary when the washer is used near children.
- 7. Before the washer is removed from service or discarded, remove the door to the washing compartment.
- 8. Do not reach into the washer if the wash drum is moving.
- 9. Do not install or store the washer where it will be exposed to water and/or weather.
- 10. Do not tamper with the controls.
- 11. Do not repair or replace any part of the washer or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that the user understands and has the skills to carry out.
- 12. To reduce the risk of an electrical shock or fire, DO NOT use an extension cord or an adapter to connect the washer to an electrical power source.
- 13. Use the washer only for its intended purpose, washing clothes.
- 14. Never wash machine parts or automotive parts in the machine. This could result in serious damage to the basket.
- 15. ALWAYS disconnect the washer from its electrical supply before attempting any service.
- 16. Install the washer according to the INSTALLATION INSTRUCTIONS. All connections for water, drain, electrical power and grounding must comply with local codes and, when required, be made by licensed personnel.
- 17. To reduce the risk of fire, textiles which have traces of any flammable substances such as vegetable oil, cooking oil, machine oil, flammable chemicals, thinner, etc. or anything containing wax or chemicals such as in mops or cleaning cloths, must not be put into the washer. These flammable substances may cause the fabric to ignite.
- 18. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- 19. Keep the washer in good condition. Bumping or dropping the washer can damage its safety features. If this occurs, have the washer checked by a qualified service person.

#### **Safety Information**

- 20. If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or its service agent.
- 21. Be sure that water connections have a shut-off valve and that fill hose connections are tight. CLOSE the shut-off valves at the end of each wash day.
- 22. The loading door MUST BE CLOSED any time the washer is to fill, tumble or spin. DO NOT bypass the loading door switch and permit the washer to operate with the loading door open.
- 23. Always read and follow the manufacturer's instructions on packages of laundry and cleaning aids. Heed all warnings and precautions. To reduce the risk of poisoning or chemical burns, keep them out of the reach of children at all times (preferably in a locked cabinet).
- 24. Always follow the fabric care instructions supplied by the textile manufacturer.
- 25. Never operate the washer with any guards and/or panels removed.
- 26. DO NOT operate the washer with missing or broken parts.
- 27. DO NOT bypass any safety devices.
- 28. Failure to install, maintain and/or operate this washer according to the manufacturer's instructions may result in conditions that can produce bodily injury and/or property damage.

NOTE: The WARNING and IMPORTANT SAFETY INSTRUCTIONS appearing in this manual are not meant to cover all possible conditions and situations that may occur. Common sense, caution and care must be exercised when installing, maintaining and operating the washer.

Any problems or conditions not understood should be reported to the dealer, distributor, service agent or the manufacturer.



#### WARNING

This machine must be installed, adjusted, and serviced by qualified electrical maintenance personnel familiar with the construction and operation of this type of machinery. They must also be familiar with the potential hazards involved. Failure to observe this warning may result in personal injury and/or equipment damage, and may void the warranty.

SW004

IMPORTANT: Ensure that the recommended clearances for inspection and maintenance are provided. Never allow the inspection and maintenance space to be blocked.



#### **WARNING**

Install the machine on a level floor of sufficient strength. Failure to do so may result in conditions which can produce serious injury, death and/or property damage.

W703



#### **CAUTION**

Be careful around the open door, particularly when loading from a level below the door. Impact with door edges can cause personal injury.

SW025



## **WARNING**

Never touch internal or external steam pipes, connections, or components. These surfaces can be extremely hot and will cause severe burns. The steam must be turned off and the pipe, connections, and components allowed to cool before the pipe can be touched.

SW014

#### **Safety Decals**

Safety decals appear at crucial locations on the machine. Failure to maintain legible safety decals could result in injury to the operator or service technician.

To provide personal safety and keep the machine in proper working order, follow all maintenance and safety procedures presented in this manual. If questions regarding safety arise, contact the manufacturer immediately.

Use manufacturer-authorized spare parts to avoid safety hazards.

### **Operator Safety**



#### WARNING

NEVER insert hands or objects into basket until it has completely stopped. Doing so could result in serious injury.

SW012

To ensure the safety of machine operators, the following maintenance checks must be performed daily:

- 1. Prior to operating the machine, verify that all warning signs are present and legible. Missing or illegible signs must be replaced immediately. Make certain that spares are available.
- 2. Check door interlock before starting operation of the machine:
  - a. Attempt to start the machine with the door open. The machine should not start with the door open.
  - b. Close the door without locking it and attempt to start the machine. The machine should not start with the door unlocked.
  - c. Close and lock the door and start a cycle. Attempt to open the door while the cycle is in progress. The door should not open.

If the door lock and interlock are not functioning properly, call a service technician.

- 3. Do not attempt to operate the machine if any of the following conditions are present:
  - a. The door does not remain securely locked during the entire cycle.
  - b. Excessively high water level is evident.
  - c. Machine is not connected to a properly grounded circuit.

Do not bypass any safety devices in the machine.



#### **WARNING**

Never operate the machine with a bypassed or disconnected balance system. Operating the machine with severe out-of-balance loads could result in personal injury and serious equipment damage.

SW039

## Introduction

#### **Customer Service**

Alliance Laundry Systems is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

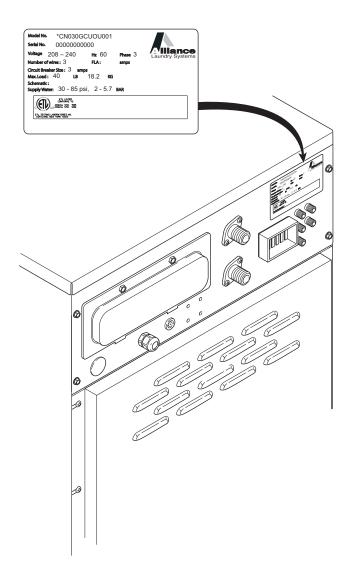
If literature or replacement parts are required, contact the source from whom the machine was purchased or contact Alliance Laundry Systems at (920) 748-3950 for the name of the nearest authorized parts distributor. For technical assistance, contact your local distributor or call:

Alliance Laundry Systems (920) 748-3121 Ripon, Wisconsin U.S.A.

Alliance International +32 56 41 20 54 Wevelgem, Belgium

## **Nameplate Location**

When calling or writing about your product, be sure to mention model and serial numbers. Model and serial numbers are located on nameplate(s) as shown.



CHM3025P

## **Model Identification**

Information in this manual is applicable to these washers.

HCD020GD2	HCN080GNF	HCU080GEF	SCN040GX2	SCU040GX2
HCL020GD2	HCN080GXF	HCU080GLF	SCN040GY2	SCU040GY2
HCL020GN2	HCN080GYF	HCU080GNF	SCN060GC2	SCU060GC2
HCL030GN2	HCU020GC2	HCU080GXF	SCN060GD2	SCU060GD2
HCL040GN2	HCU020GD2	HCU080GYF	SCN060GE2	SCU060GE2
HCL060GN2	HCU020GE2	HCZ020GN2	SCN060GN2	SCU060GL2
HCN020GC2	HCU020GL2	HCZ030GN2	SCN060GX2	SCU060GN2
HCN020GD2	HCU020GN2	SCD030GD2	SCN060GY2	SCU060GX2
HCN020GE2	HCU020GX2	SCD040GD2	SCN080GCF	SCU060GY2
HCN020GN2	HCU020GY2	SCD060GD2	SCN080GDF	SCU080GCF
HCN020GX2	HCU030GC2	SCL020GN2	SCN080GEF	SCU080GDF
HCN020GY2	HCU030GD2	SCL030GC2	SCN080GNF	SCU080GEF
HCN030GC2	HCU030GE2	SCL030GN2	SCN080GXF	SCU080GLF
HCN030GD2	HCU030GL2	SCL040GC2	SCN080GYF	SCU080GNF
HCN030GE2	HCU030GN2	SCL040GN2	SCU020GC2	SCU080GXF
HCN030GN2	HCU030GX2	SCL060GN2	SCU020GD2	SCU080GYF
HCN030GX2	HCU030GY2	SCL080GNF	SCU020GE2	UCL030GN2
HCN030GY2	HCU040GC2	SCN020GC2	SCU020GL2	UCL040GN2
HCN040GC2	HCU040GD2	SCN020GD2	SCU020GN2	UCL060GN2
HCN040GD2	HCU040GE2	SCN020GE2	SCU020GX2	UCL080GNF
HCN040GE2	HCU040GL2	SCN020GN2	SCU020GY2	UCN020GN2
HCN040GN2	HCU040GN2	SCN020GX2	SCU030GC2	UCN030GN2
HCN040GX2	HCU040GX2	SCN020GY2	SCU030GD2	UCN040GN2
HCN040GY2	HCU040GY2	SCN030GC2	SCU030GE2	UCN060GN2
HCN060GC2	HCU060GC2	SCN030GD2	SCU030GL2	UCN080GNF
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HCN060GY2	HCU060GX2	SCN040GC2	SCU040GD2	UCU080GNF
HCN080GCF	HCU060GY2	SCN040GD2	SCU040GE2	UCZ020GN2
HCN080GDF	HCU080GCF	SCN040GE2	SCU040GL2	UCZ030GN2
HCN080GEF	HCU080GDF	SCN040GN2	SCU040GN2	

# **Theory of Operation**

#### **Starting the Machine**

The door lock will not allow a cycle to be started until the door has been closed.

#### Fill

The operator selects a cycle and starts the machine. Water enters the machine through water valves that are controlled by the microcomputer. As water fills the basket, a column of air is trapped in a pressure bulb and hose. The air pressure continues to increase as the basket fills with water. When the desired water level is reached, the water level sensor triggers the microcomputer and the water valves turn off.

A vacuum breaker installed in the inlet plumbing prevents the backflow of water.

## Supply

The operator can either connect external liquid supplies to the machine or fill the supply dispenser with liquid or dry supplies. The supply dispenser's nozzles flush the compartments with water at the appropriate times throughout a cycle.

#### Wash

The basket includes ribs that lift the laundry from the wash water. The laundry then tumbles back into the bath.

In 2-speed and variable-speed models, 1 dual-speed motor drives the basket's shaft with a V-belt.

20-60 pound capacity models use 2 bearings that are held in place by a single cast-iron trunnion that is bolted to the frame. 80-pound capacity models use a 2 flange-type bearing that is bolted to the frame.

#### **Drain**

Cabinet Hardmount washer-extractors use a normally open gravity-type drain system. No pump is used. When the drain valve opens, the perforated basket allows water to drain from it

In the event of a power failure, the drain valve will open automatically and the machine will drain.

#### **Extract**

A final high-speed extract step removes water from the load, which maximizes drying efficiency.

The door lock system will not allow the door to be opened until the cycle has finished.

# **Troubleshooting**



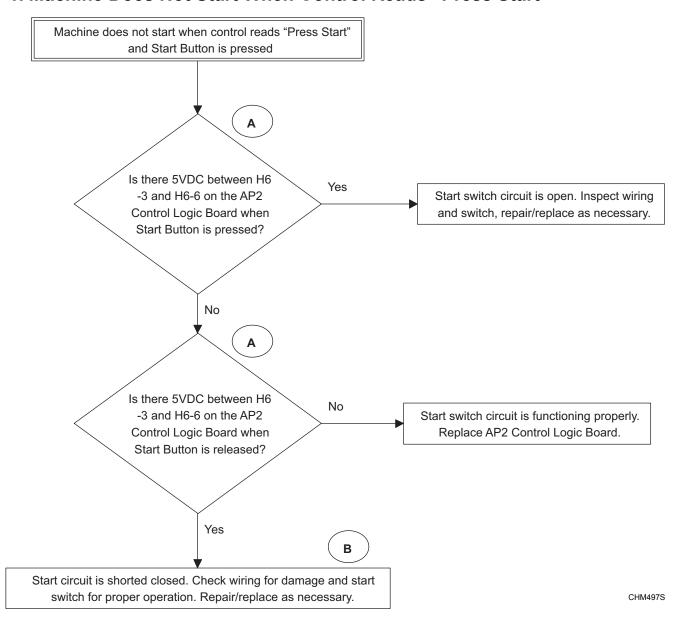
#### **WARNING**

To reduce the risk of electrical shock, fire, explosion, serious injury or death:

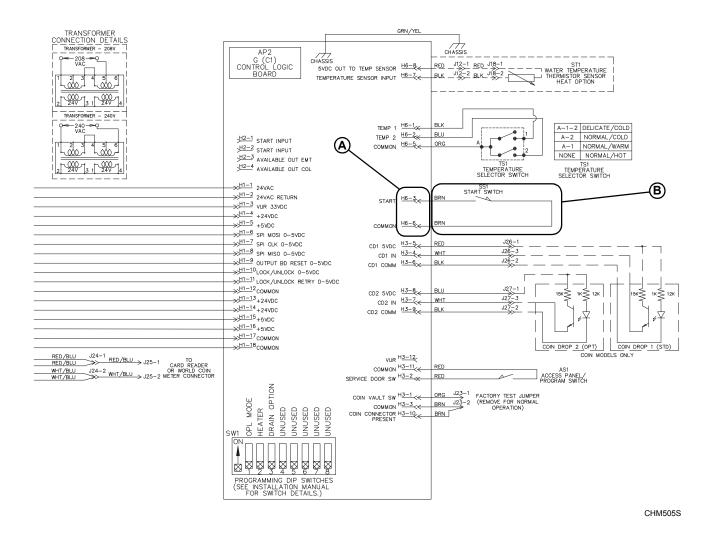
- Disconnect electrical power to the washer-extractor before servicing it.
- Close the gas shut-off valve to the washer-extractor (when applicable) before servicing it.
- Never start the washer-extractor with any guards/panels removed.
- Whenever ground wires are removed during servicing, these ground wires must be reconnected to ensure that the washer-extractor is properly grounded.

W461R1

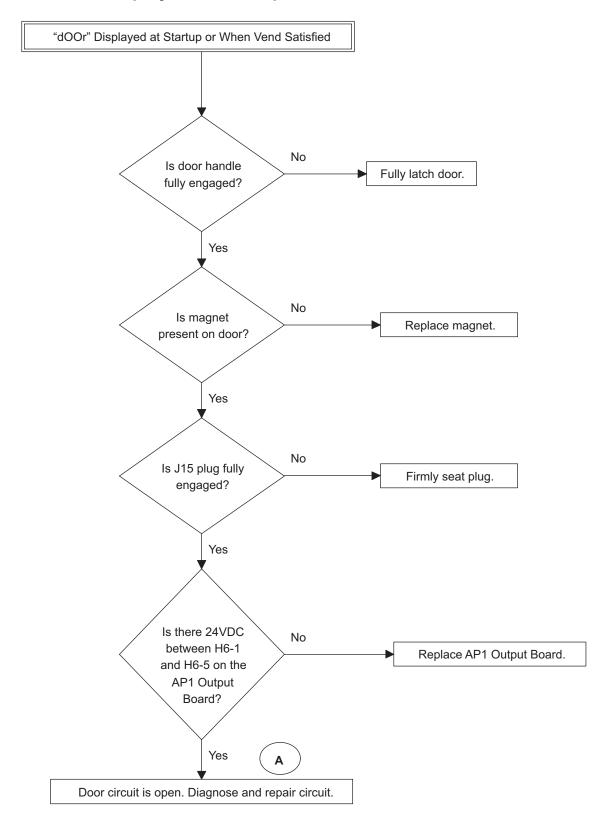
## 1. Machine Does Not Start When Control Reads "Press Start"



#### Machine Does Not Start When Control Reads "Press Start"

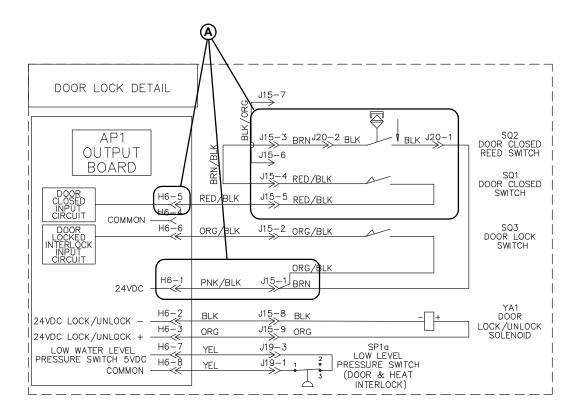


## 2. "dOOr" Displayed at Startup or When Vend Satisfied



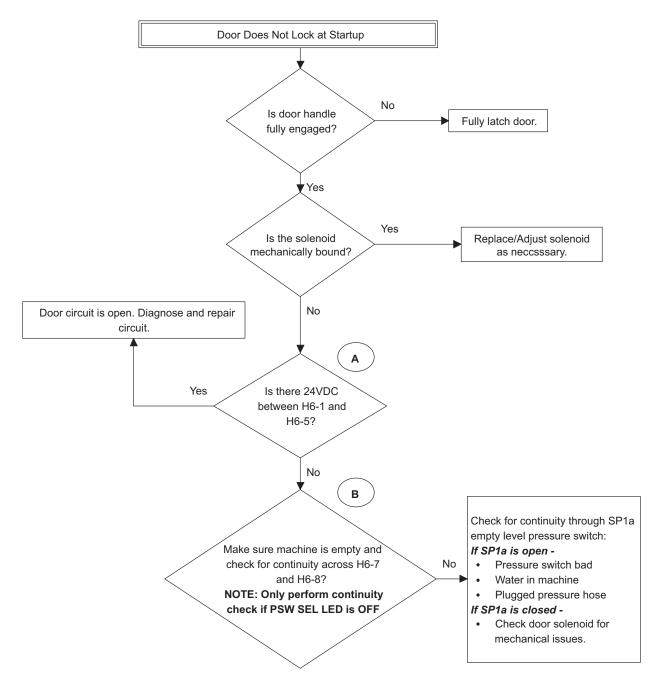
CHM482S

## "dOOr" Displayed at Startup or When Vend Satisfied



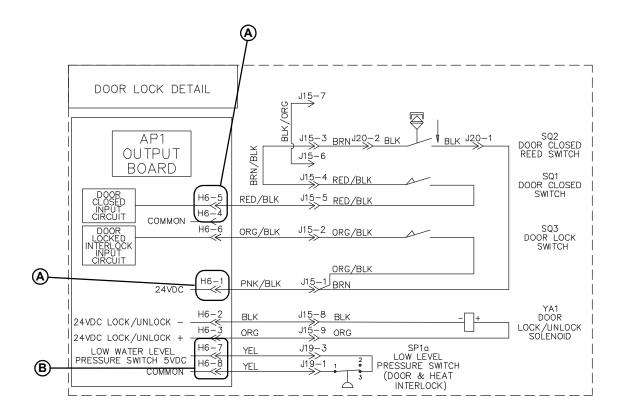
CHM504S

## 3. Door Does Not Lock at Startup



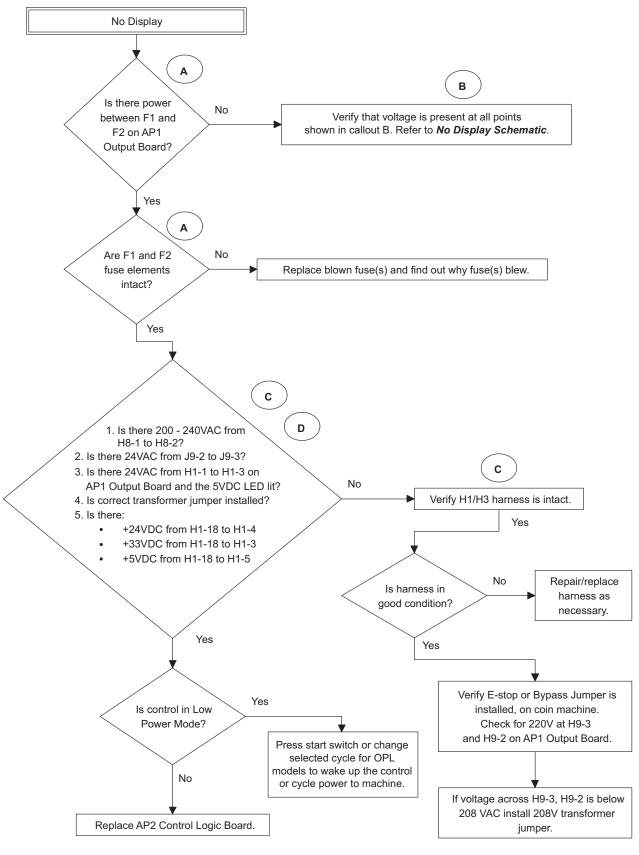
CHM480S

## **Door Does Not Lock at Startup**



CHM504S

## 4. No Display

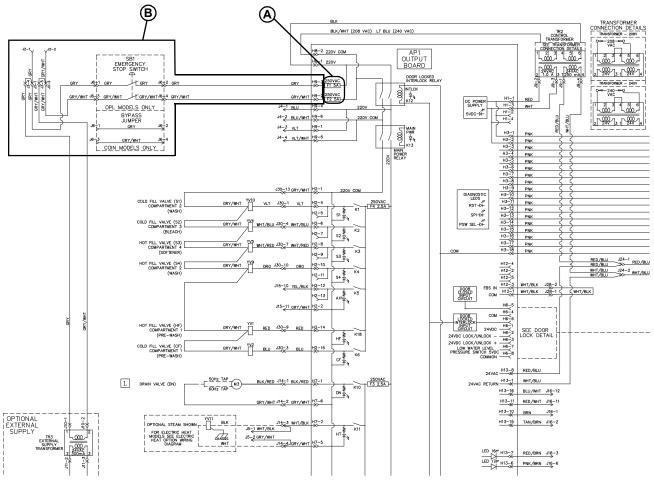


CHM483S

Troubleshooting
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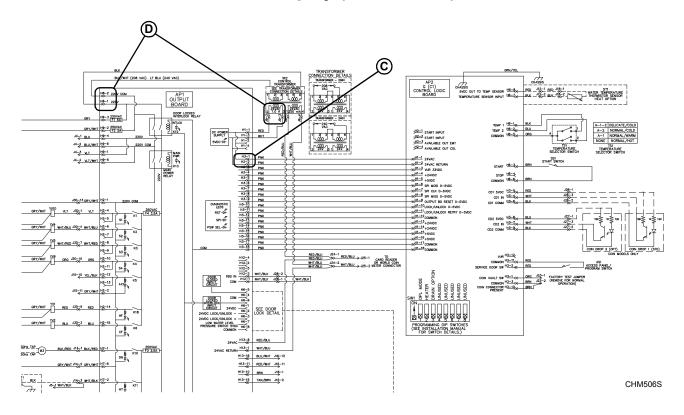
Please see following 2 pages for wiring diagram information.

## No Display (Sheet 1 of 2)

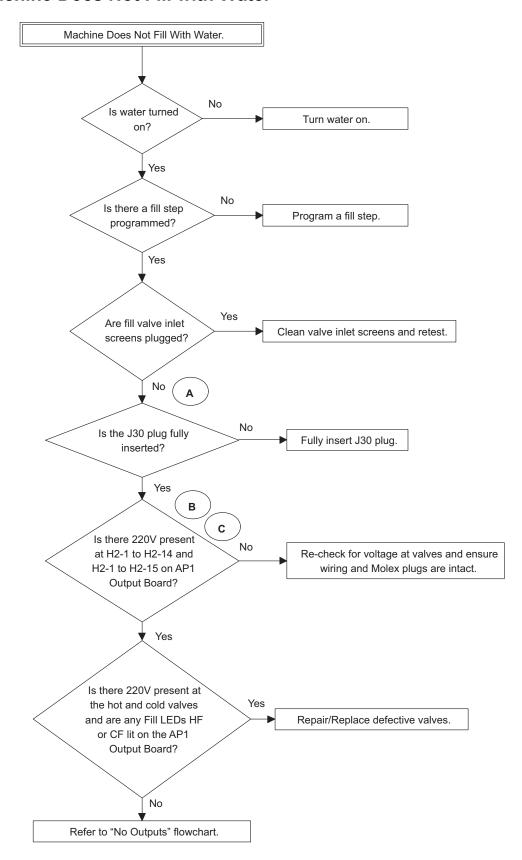


CHM509S

## No Display (Sheet 2 of 2)

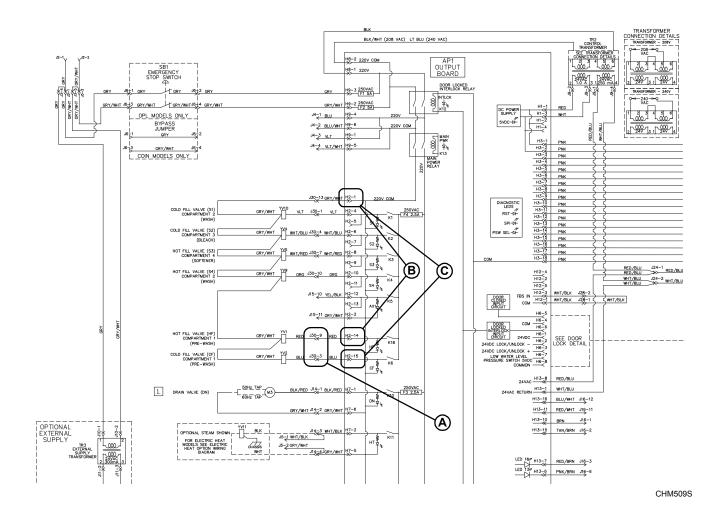


#### 5. Machine Does Not Fill with Water

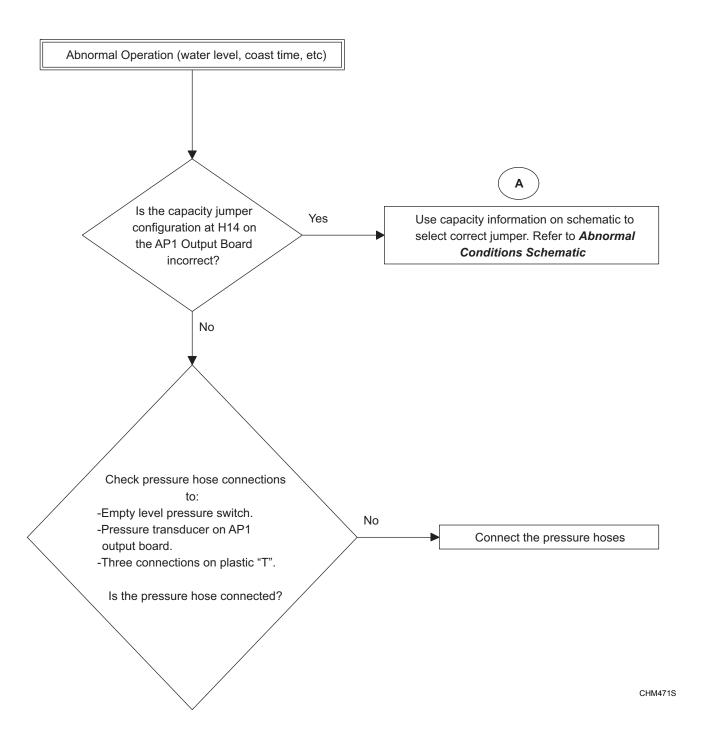


CHM481S

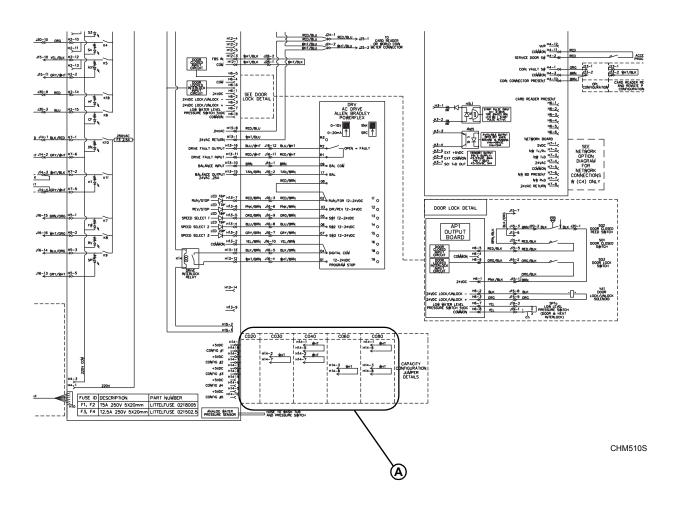
#### **Machine Does Not Fill with Water**



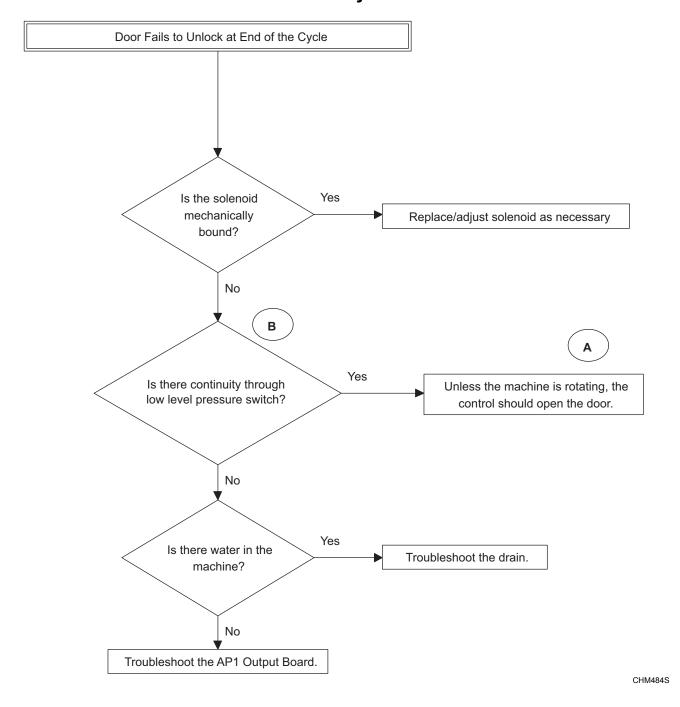
## 6. Abnormal Operation



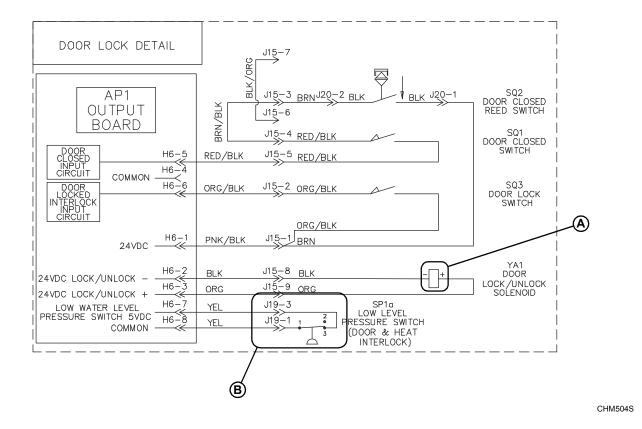
## **Abnormal Operation**



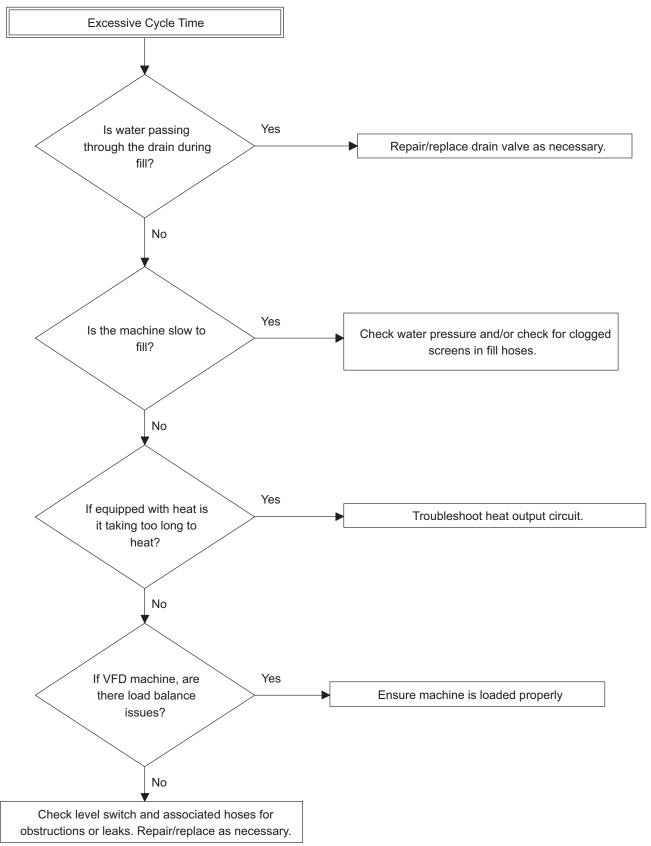
## 7. Door Fails to Unlock at End of the Cycle



## Door Fails to Unlock at End of fhe Cycle

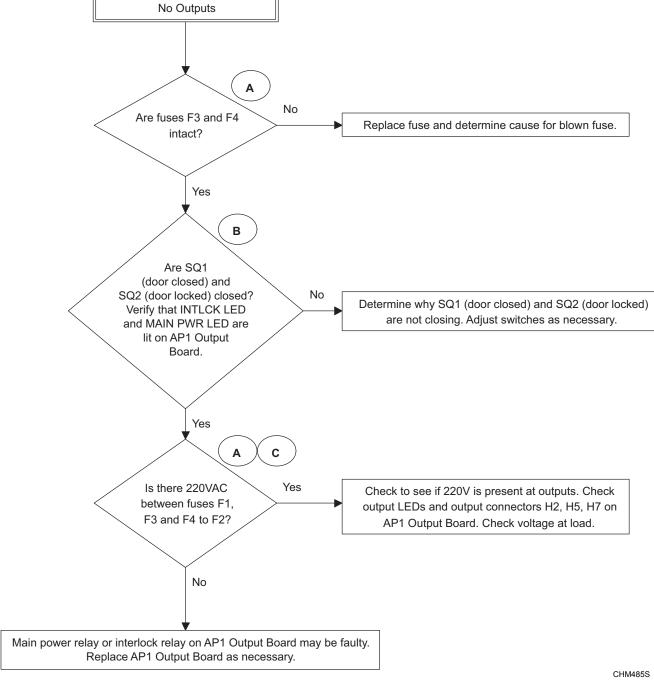


## 8. Excessive Cycle Time



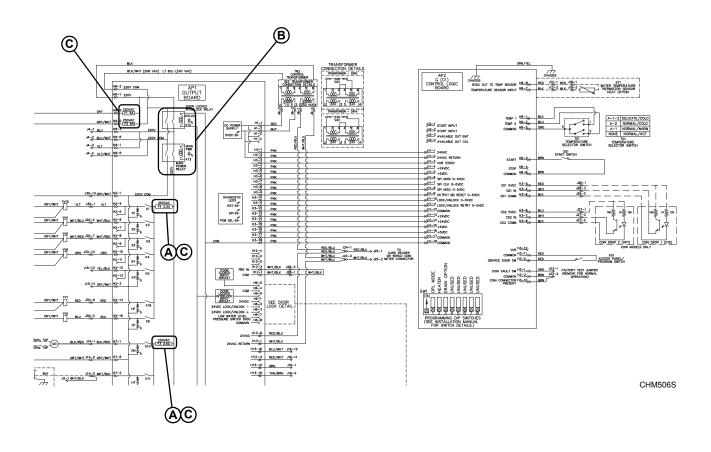
CHM489S

## 9. No Outputs

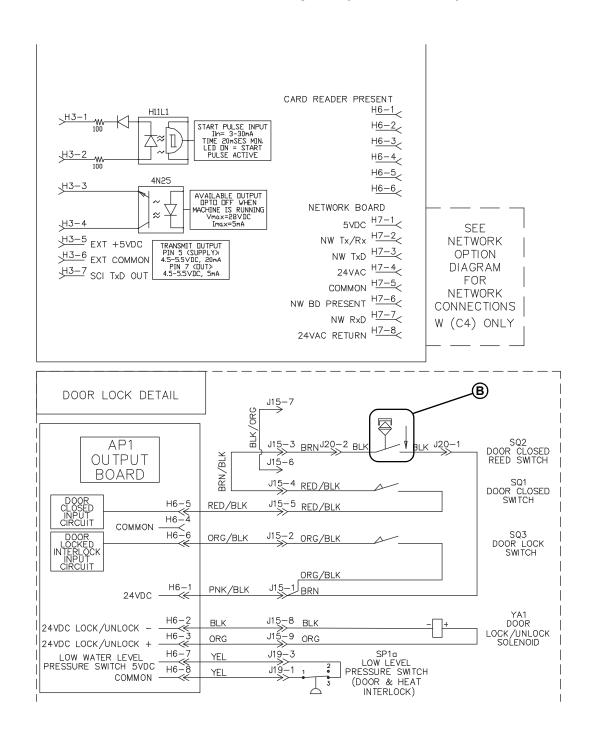


01111111000

## No Outputs (Sheet 1 of 2)



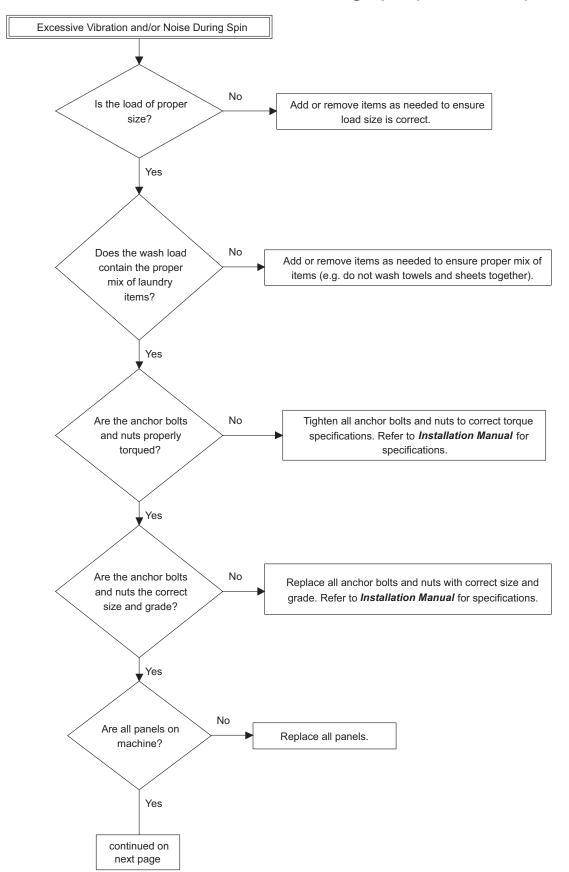
## No Outputs (Sheet 2 of 2)



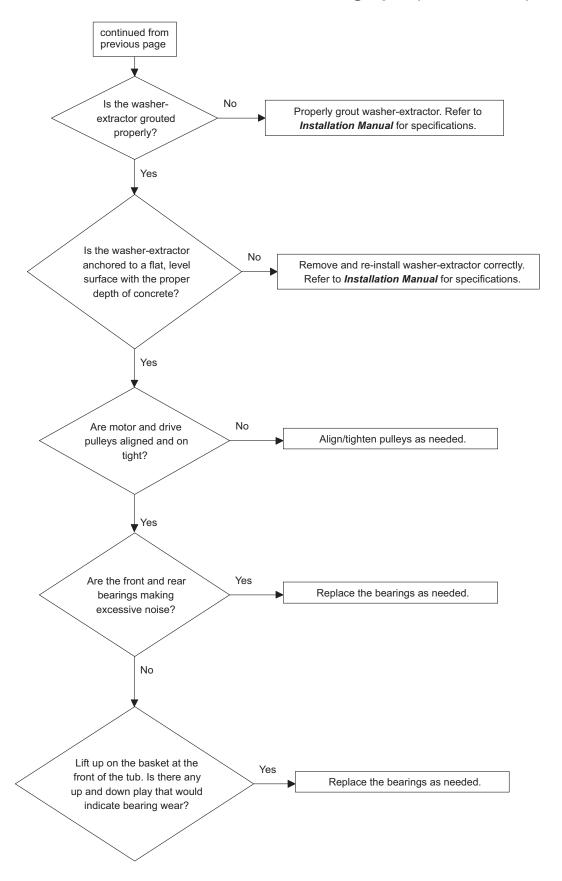
CHM500S

NOTE: Refer to the wiring diagram supplied with your machine.

## 10. Excessive Vibration and/or Noise During Spin (Sheet 1 of 2)

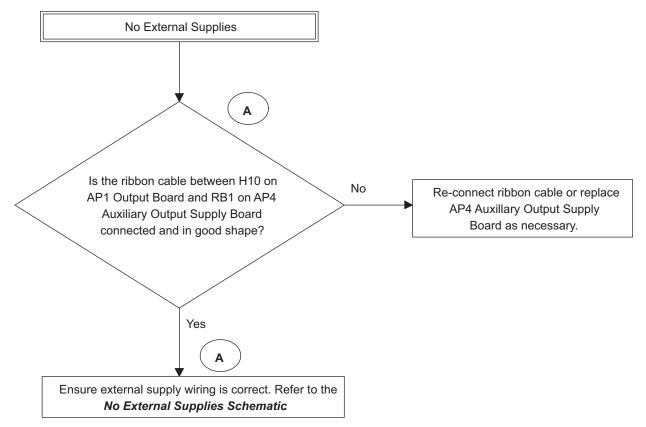


## 10. Excessive Vibration and/or Noise During Spin (Sheet 2 of 2)



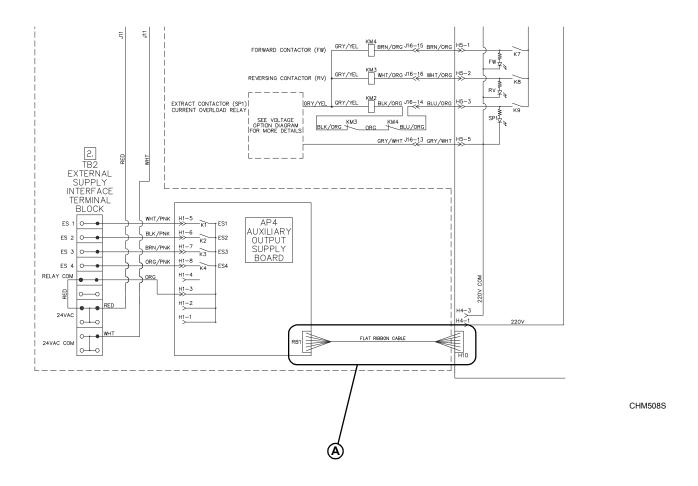
CHM492S-b

## 11. No External Supplies

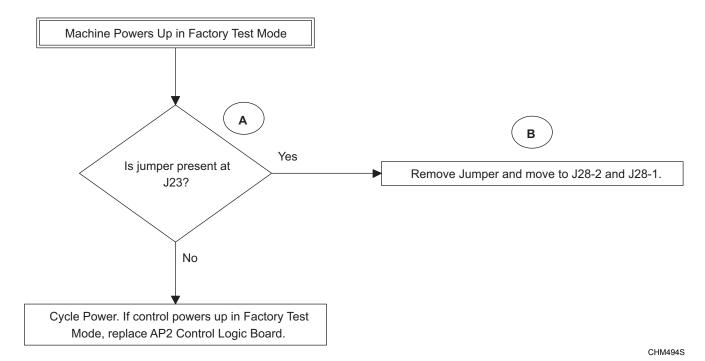


CHM493S

## **No External Supplies**



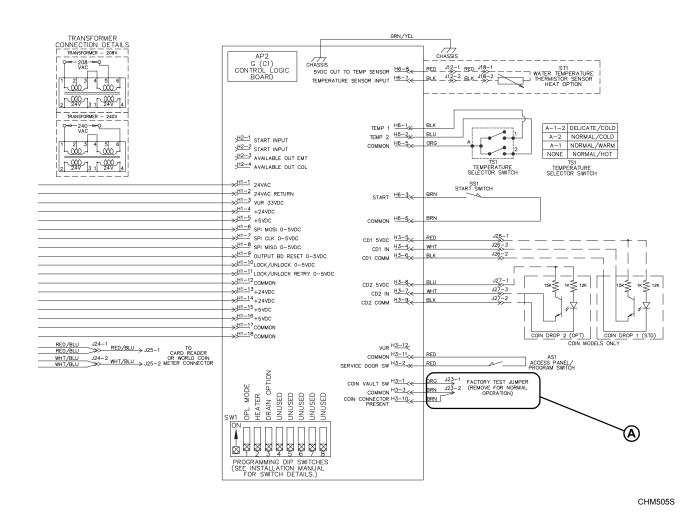
## 12. Machine Powers Up in Factory Test Mode



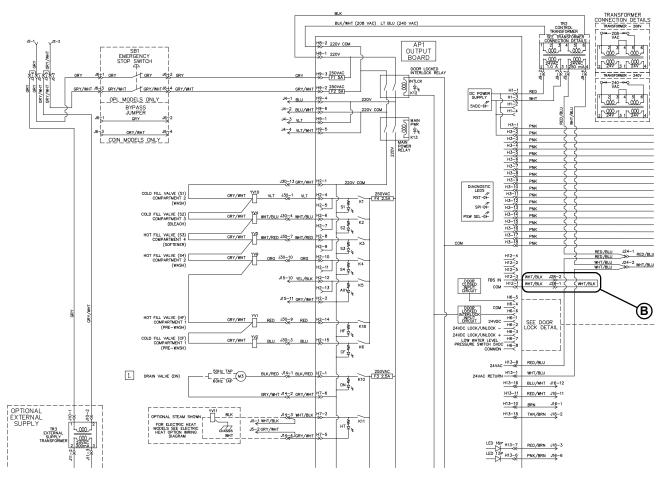
Troubleshooting	Trou	ıble	shoc	otino
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Please see following 2 pages for wiring diagram information.

### Machine Powers Up in Factory Test Mode (Sheet 1 of 2)

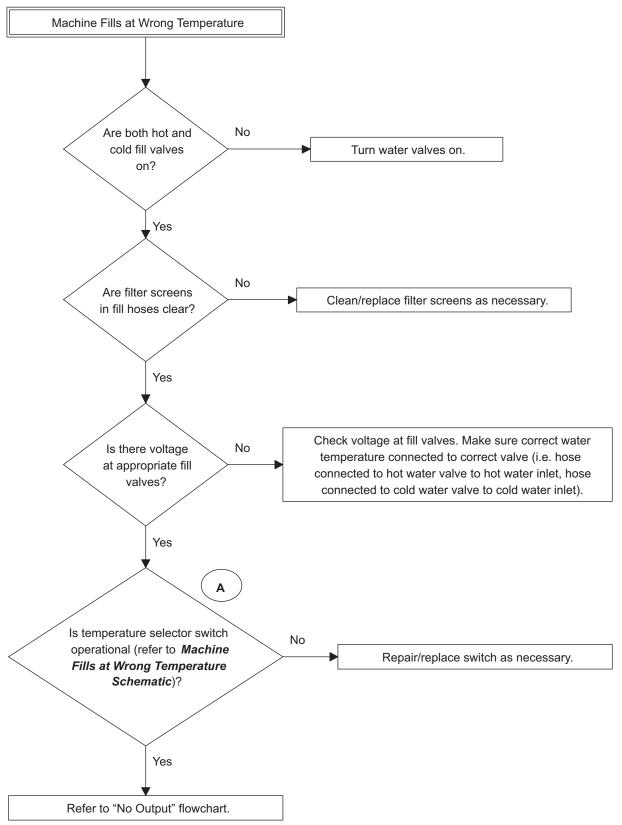


## Machine Powers Up in Factory Test Mode (Sheet 2 of 2)



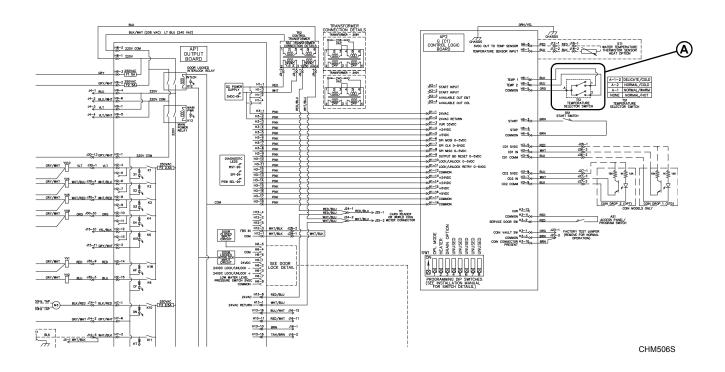
CHM509S

## 13. Machine Fills at Wrong Temperature

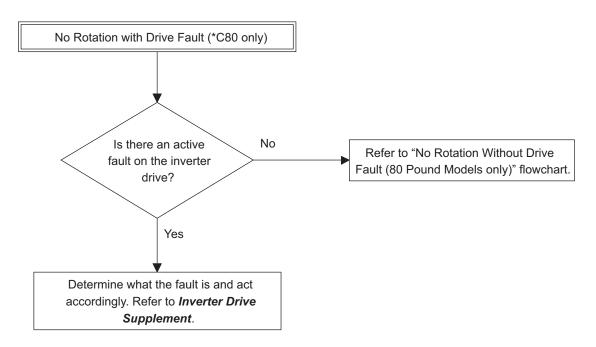


CHM496S

## **Machine Fills at Wrong Temperature**

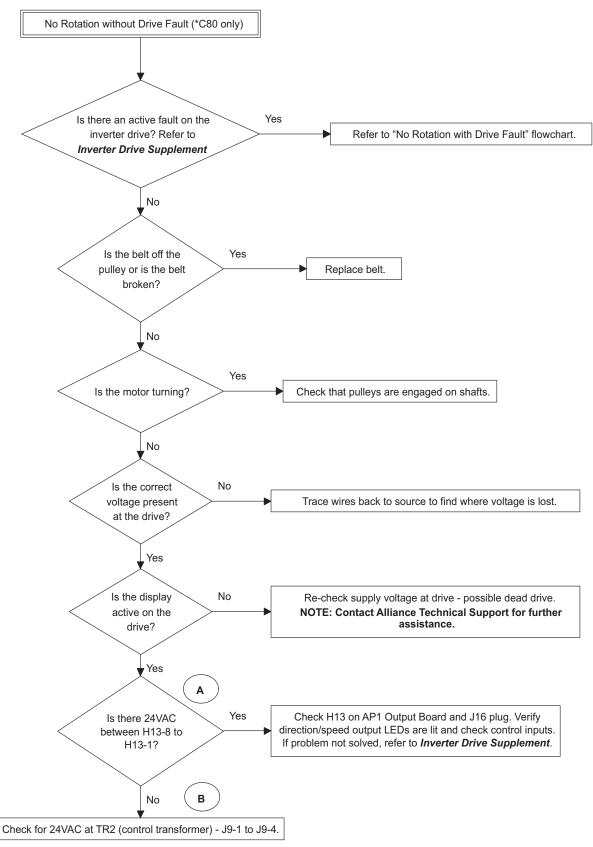


# 14. No Rotation with Drive Fault (80 Pound Models Only)



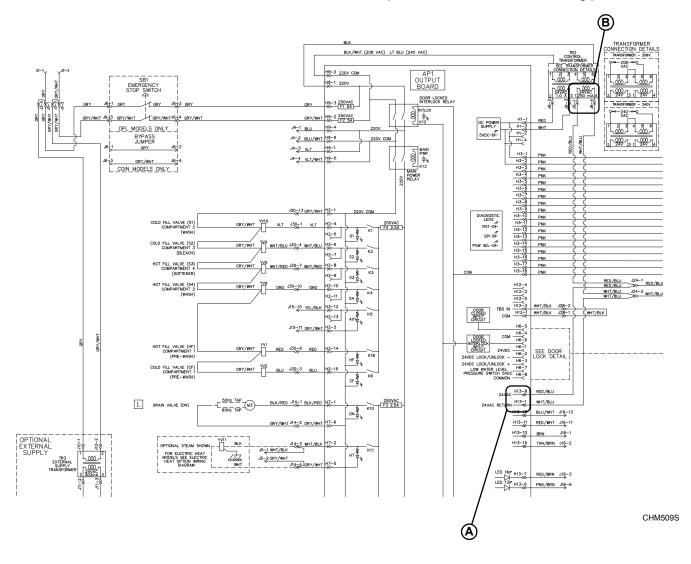
CHM488S

# 15. No Rotation without Drive Fault (80 Pound Models Only)

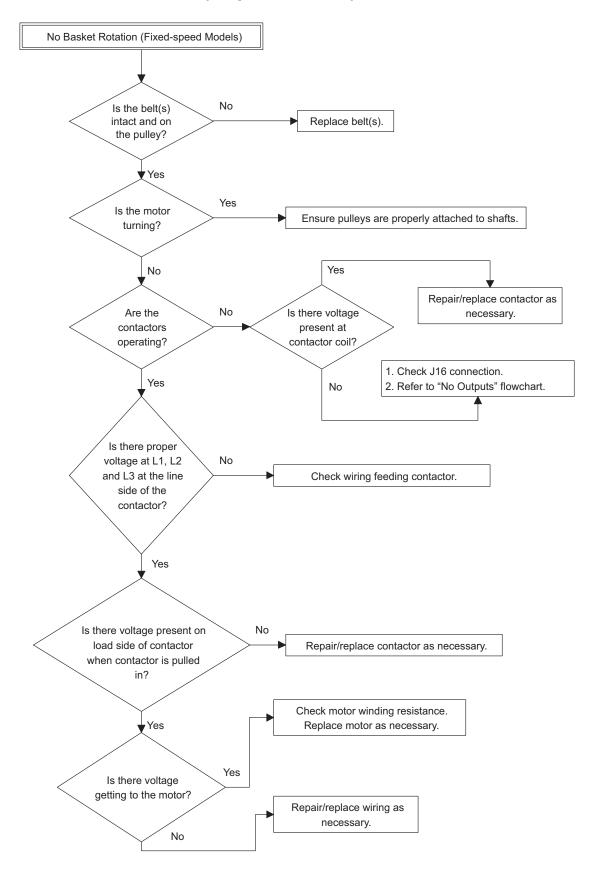


CHM487S

### No Rotation without Drive Fault (80 Pound Models Only)

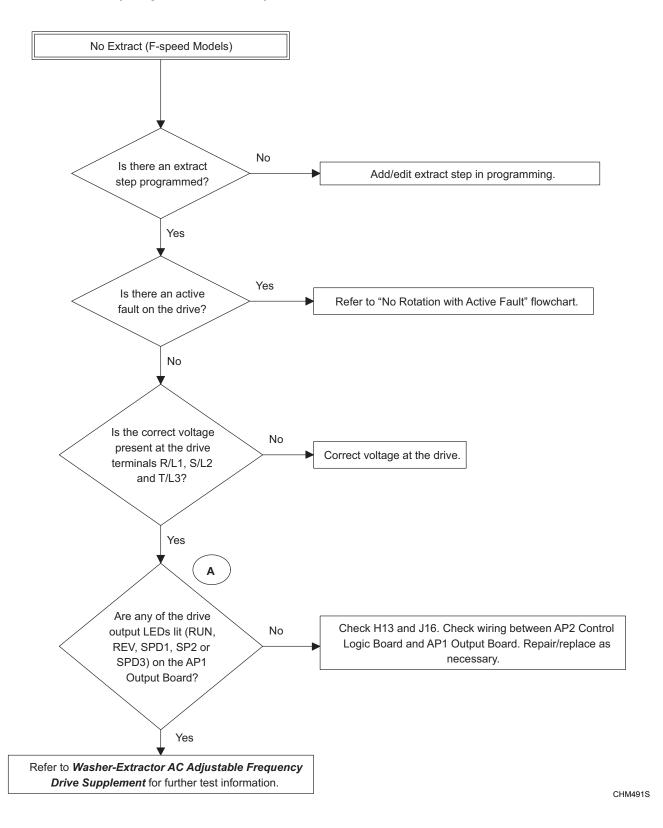


## 16. No Basket Rotation (F-speed Models)

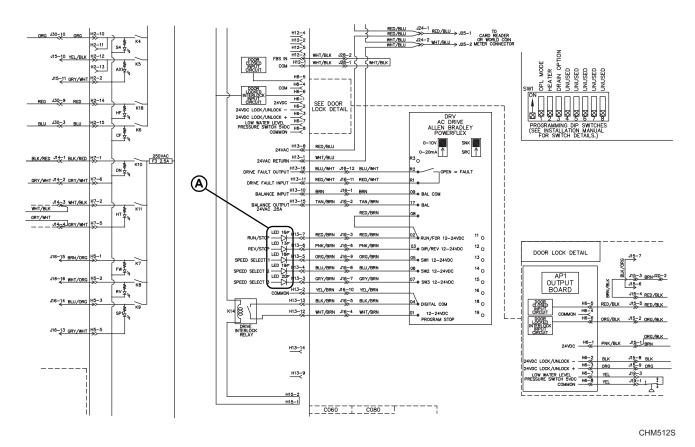


CHM486S

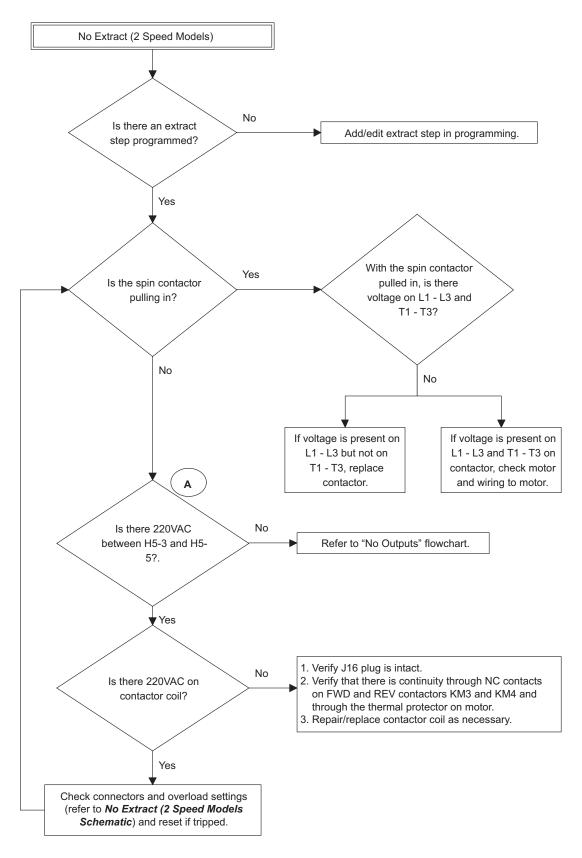
#### 17. No Extract (F-speed Models)



## **No Extract (F-speed Models)**

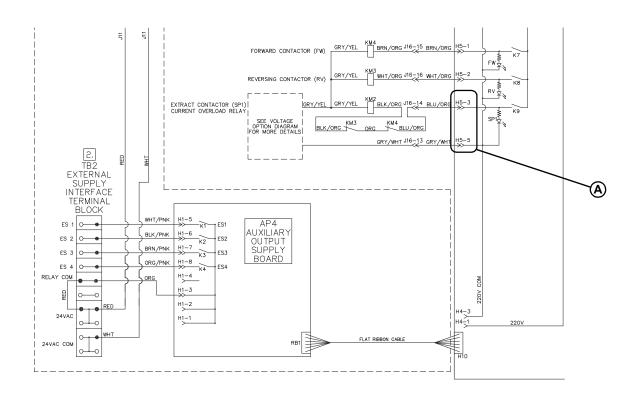


#### 18. No Extract (2 Speed Models)



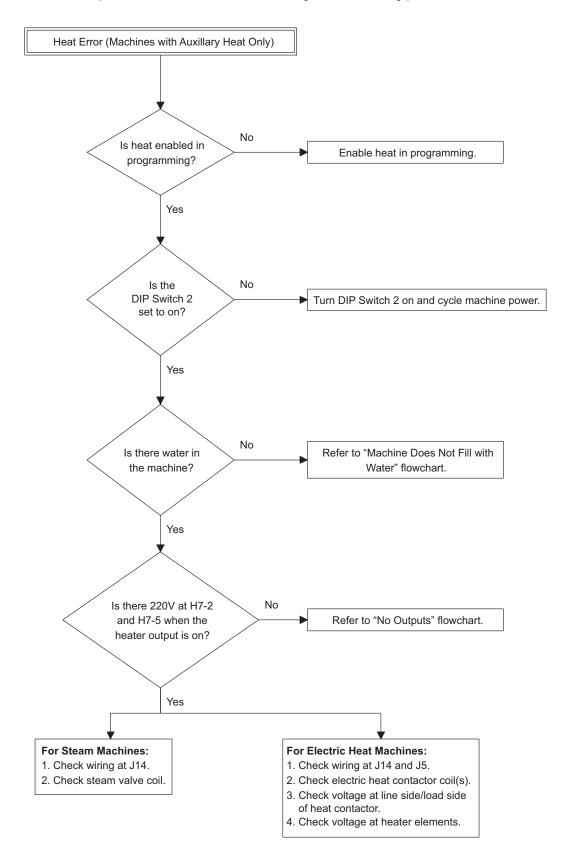
CHM490S

## No Extract (2 Speed Models)



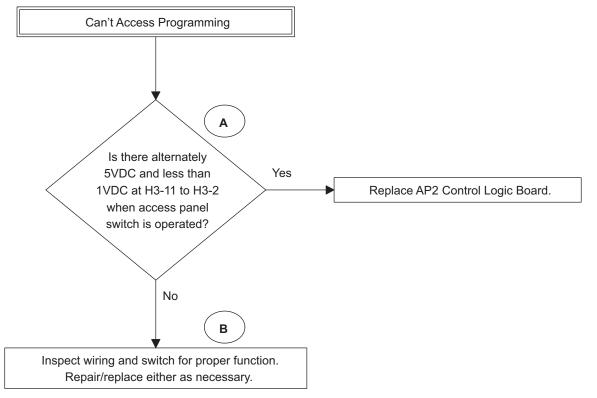
CHM508S

## 19. Heat Error (Machines with Auxillary Heat Only)



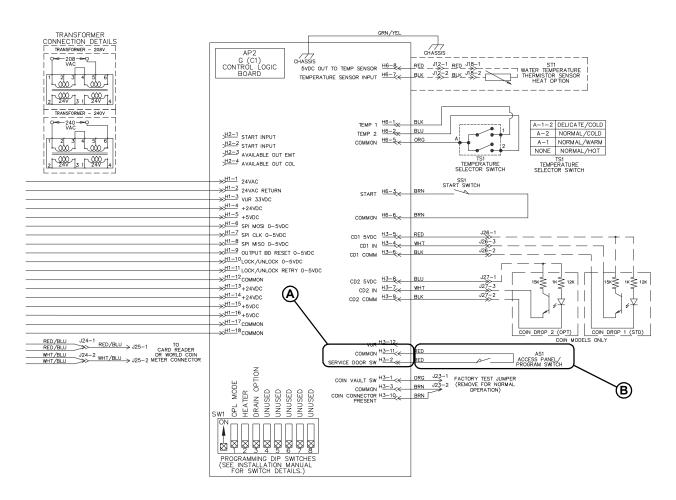
CHM479S

# 20. Can't Access Programming



CHM495S

#### **Can't Access Programming**



CHM505S