Splendide TECHNICAL EDUCATION **GROUP PRESENTS**

TRAINING GUIDE

PRODUCT: WASHER / WASHER-DRYER COMBO MODEL: AW 120 / AW 122 / AW 125 AWD 120 / AWD 121 / AWD 129

| The information included in this Splendide Repair Manual may change without notice. Please see our web site www.splendide.com/service/docs.html for updates, corrections or additions. | Pages: | 1 - 18 |
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SAFE SERVICE PRACTICES

This Repair Manual is intended for persons having electrical and mechanical training and a level of knowledge of these subjects generally considered acceptable in the Appliance Service Industry. Splendide cannot be responsible, nor assumes any liability for injury or damages of any kind arising from the use or misuse of the information contained in this Repair Manual.

If you have any questions regarding the proper diagnosis, repair or operation of any Splendide Appliance, please contact Splendide Division Westland Sales at 1-800-356-0766.

SERVICING SAFEGAURDS:

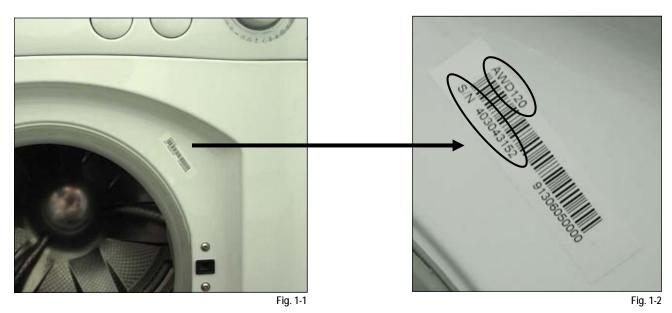
To avoid personal injury and/or property damage, it is important that safe servicing practices be observed at all times. Examples of safe service practices are listed below but are not limited to the following:

- 1) Never attempt a product repair if you have any doubts as to your ability to complete the repair in a safe and satisfactory manner.
- 2) Before servicing or removing an appliance:
 - Disconnect power to the appliance.
 - Turn off the gas / LP supply.
 - Turn off the water supply.
- 3) Never interfere with the proper operation of any safety device.
- 4) Use only genuine factory replacement parts as substitutions may interfere with compliances to home safety codes or standards.
- 5) It is extremely important that all safety ground connections be reestablished prior to the completion of the service call. Failure to do so will result in a hazardous condition being created.
- 6) Prior to returning the appliance back into active service, ensure the following:
 - All electrical connections are correct and secure.
 - Electrical leads are properly dressed and secured away from sharp edges, high temperature components and moving parts.
 - All non-insulated electrical terminals, connectors, heaters, etc. are adequately spaced away from metal parts or panels.
 - All safety grounds (both internal and external) are correctly and securely connected.
 - All access panels are properly and securely reassembled.

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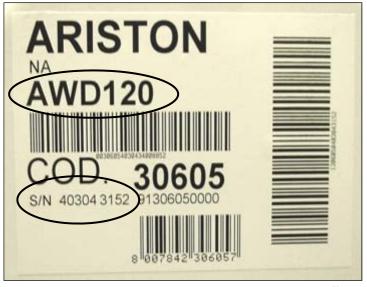
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1. MODEL & SERIAL NUMBER LOCATION



• The Model and Serial Number Tag is located on the front of the Appliance behind the door (Fig. 1-1). The Model shown is an AWD120 with a Serial Number of 403043152 (Fig. 1-2).

Note: Numbers located to the right of the nine (9) digit Serial Number are not required on the Warranty Claim Form.





• Model and Serial Number Tag located on the rear of the Appliance (Fig. 1-3).

2. TOP PANEL



• To remove the Top Panel, first remove the two (2) Phillips screws located at the rear corners of the panel (Fig. 2-1). With the two screws removed lift the rear of the panel up approximately three (3) inches and then slide the panel back, moving it away from the Control Panel (Fig. 2-2)



• With the Top Panel removed you can see the four (4) alignment slots on top of the Control Panel (Fig. 2-3) that correspond to the four (4) alignment tabs on the bottom of the Top Panel (Fig. 2-4). When re-installing the panel make sure to align the tabs and slots and then slide the panel back into place.

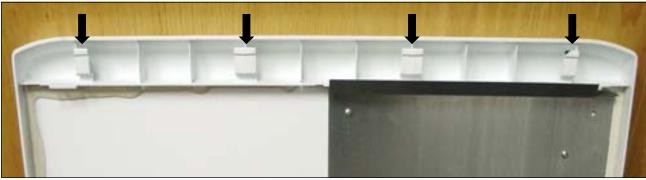


Fig. 2-4

3. CONTROL PANEL



• To remove the Control Panel, first remove the two Phillips screws located on the top corners of the Control Panel (Fig 3-1).

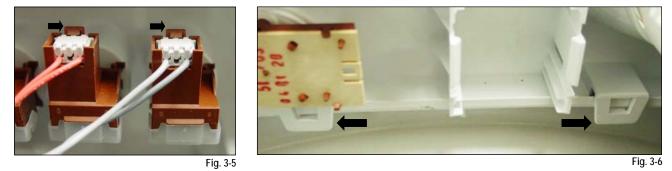


Fig. 3-2





- Next, remove the Soap Dispenser by grasping it firmly and sliding it out from its housing (Fig. 3-2). Now, remove the Dispenser Door and Program Guide by lifting out the Hinge Pin (Fig. 3-3) the pin will easily slide up and out. With the Soap Dispenser and Door completely removed you can remove the two (2) remaining Phillips Screws.
 - **TECH NOTE:** When re-installing the Control Panel make sure the bottom edge of the Soap Dispenser Housing rests on top of the Control Panel opening as shown in the box of Fig. 3-4.



• Next, remove the wiring from each Switch and the Program Selector. To remove the Switch wiring simply press the Locking Tab forward and slide the Wiring Connector up and out (Fig. 3-5). Now release the two (2) remaining Control Panel Locking Tabs located on the bottom rear of the Control Panel (Fig. 3-6) and the complete Control Panel Assembly can be removed.

4. CONTROL PANEL COMPONENTS - Switches and Potentiometers

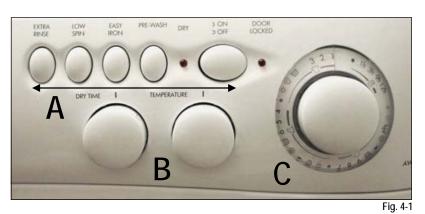
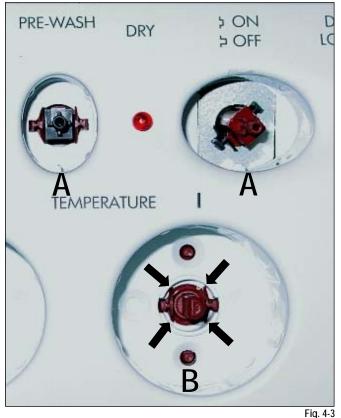


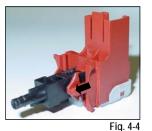


Fig. 4-2

- The Control Panel has three main controls; Push Buttons (A), Knobs (B) and the Program Dial (C).
 - To remove a Push Button (A), first mask the area to protect against damaging the Control Panel, then carefully insert a small screwdriver between the bottom of the Button and the Control Panel (Fig. 4-2), now pry the Button out and off.
 - To remove the Knobs (B) or the Program Dial (C), grasp the firmly and pull straight out toward you.



- To remove either the Switches (A) or the Potentiometers (B), first remove the Button and/or Knob. The Switch and Potentiometers are held in place by four (4) positioning tabs (Fig. 4-3). Using a small screwdriver press the tabs inward then slide the Switch or Potentiometer out from the rear of the Control Panel.
- On both Fig. 4-4 Switch and Fig. 4-5 Potentiometer you can see the positioning tabs.
 - TECH NOTE: The tabs on the Switches and Potentiometers are very delicate and can easily snap off. Use care when removing or replacing.





4. CONTROL PANEL COMPONENTS - Program Selector



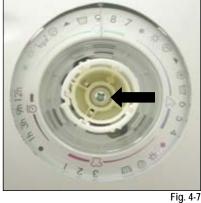




Fig. 4-6

Fig. 4-8

• To remove the Program Selector, first remove the Program Selector Knob by grasping it firmly and pulling it toward you (Fig. 4-6). With the Knob removed loosen the Phillips Screw and remove the Program Knob Bezel (Fig. 4-7). Now rotate the Program Dial until the half moon cut out lines up with the Program Selector Locking Tab (Fig 4-8).

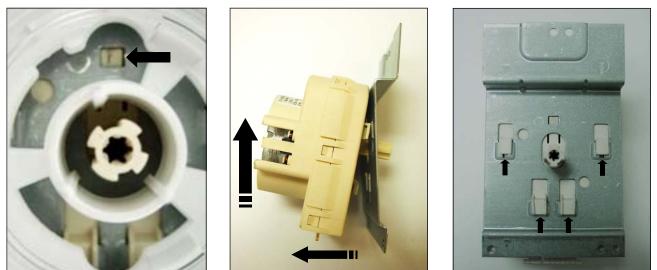


Fig. 4-9

Fig. 4-10

Fig. 4-11

• Using a small screwdriver push in on the Locking Tab (Fig. 4-9), while holding the Locking Tab in use your other hand to bring the bottom of the Program Selector slightly away from the Mounting Plate, and then remove by sliding it up and off (Fig 4-10). In Fig. 4-11 you can see the four (4) alignment tabs that hold the Program Selector to the Program Selector Mounting Plate.

TECH NOTE: The Program Selector Mounting Plate does not have to be removed in order to remove the Program Selector.

TECH TIP: The Program Knob Bezel, Program Dial and Program Knob are all keyed to make re-installation easier.

5. TOE KICK & DRAIN MOTOR



• To remove the Toe Kick, carefully insert a small screwdriver into each of the three (3) retention clips pushing each clip down and then moving to the next clip (Fig. 5-1). With the retention clips released the Toe Kick will unsnap from the base (Fig. 5-2).

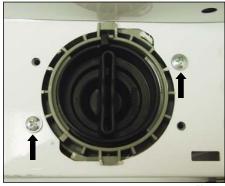


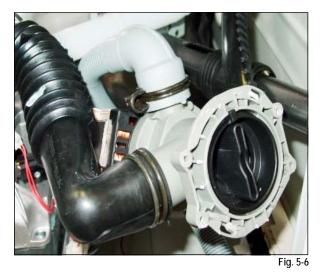
Fig. 5-3

• The Drain Motor is held in place with two (2) Phillips screws and a twist lock fitting (Fig. 5-3). Remove the two (2) Phillips screws, but leave the drain motor in place until you remove the Bottom Pan in Fig. 5-5.



• With the Toe Kick removed you also have access to the Drain Clean-out (Fig. 5-4).

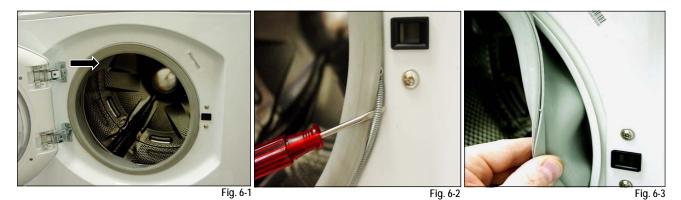




- Fig. 5-5
- With the two Drain Motor screws removed, carefully lay the Washer on its back and remove the four (4) Phillips screws that hold the Bottom Pan to the frame. With the Bottom Pan removed twist the Drain Motor Clockwise to release it from its mounting. To remove the Drain Motor remove the three (3) hose connections and wiring.

TECH TIP: The Drain Hose can be replaced through the Rear Access Panel without removing the Drain Motor, see Section 11.

6. DRUM BOOT



• To remove the Drum Boot (Fig. 6-1) start by removing the Door Boot Spring (Fig. 6-2). The Door Boot Spring is located just under the front lip of the Drum Boot. Using a small screwdriver, slide the screwdriver under the spring and carefully remove it from around the seal. With the Door Boot Spring removed, unseat the Door Boot from the washer door opening (Fig. 6-3). As you remove the Door Boot from the door opening note how the seal will be reseated on the door opening when replaced.

TECH NOTE: When reinstalling the Door Boot make sure that the Boot Tab is located at the11:00 O'clock position (Fig. 6-1).



Fig. 6-4

Fig. 6-5

Fig. 6-6

- With the Door Boot unseated from the door opening remove the Top Panel as described in Section 2. For easier access to the
 Door Boot Clamp Bolt (Fig. 6-5) remove the Soap Dispenser Housing (Fig. 6-4) as described in Sections 3 and 8. Loosen the Door
 Boot Clamp Bolt using an 8mm Nut Driver (Fig. 6-6), but do not loosen completely. With the Door Boot Clamp loose you can now
 remove the Door Boot.
 - **TECH TIP:** When installing the new Door Boot leave the Boot Clamp loosely fit until you seat the Boot to the Outer Drum, then tighten the Boot Clamp Bolt. Also make sure to water test the unit before replacing the Top Panel to ensure maximum visibility for possible leaks.

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7. DOOR SWITCH



• To remove the Door Switch, remove the two (2) T-15 Torx screws (Fig. 7-1). Then remove the Top Panel as described in Section 2. With the Top Panel removed disconnect the wire harness from the Door Switch and replace (Fig. 7-2).

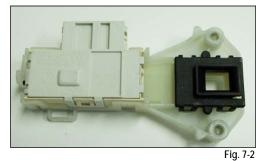


Fig. 7-1

8. WATER VALVES

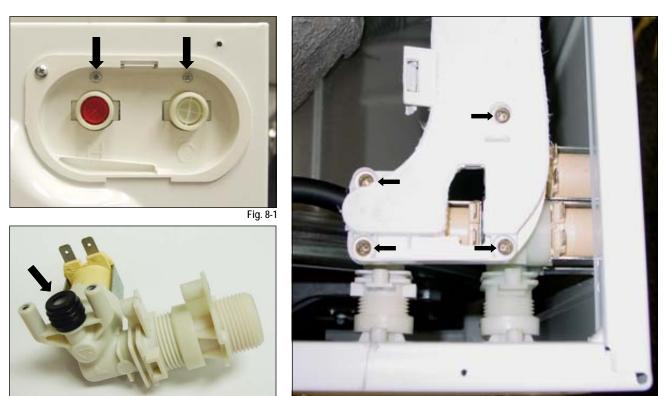


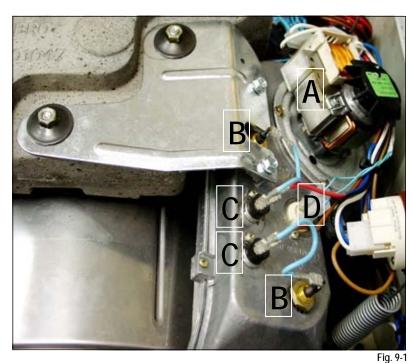


Fig. 8-3

• To remove either Water Valve, first remove its rear mounting screw (Fig. 8-1), then remove the Top Panel as described in Section 2. Then remove the two (2) Phillips screws for the Valve being replaced (Fig. 8-3). When you remove the valve be careful that you also remove the Valve Seal (Fig. 8-2) which may still be inserted into the Dispenser Housing. It will be easier to mount the new Water Valve into the Dispenser Housing if the Valve Seal is already fitted to the Water Valve when replaced.

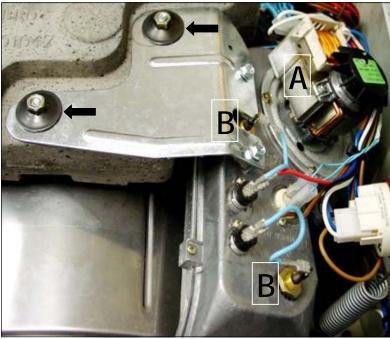
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9. HEATER ASSEMBLY (AWD 120 Only)



INDIVIDUAL COMPONENTS:

- A. Blower Motor
- **B.** Heater, 120v / 1200w
- C. High Limit Thermostats 340°f, non-resetable D. NTC
- **TECH TIP:** Both the High Limit Thermostats and NTC can be replaced without removing the Heater Assembly.



HEATER ASSEMBLY REMOVAL:

When it's necessary to replace either the Blower Motor (A) or the Heating Element (B) it is easiest to remove the complete Heater Assembly, and then remove the individual components.

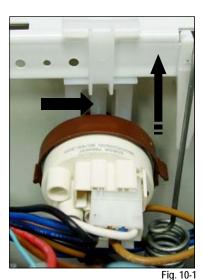
To remove the Heater Assembly, remove the two (2) 13mm Heater Mounting Bracket Bolts (Fig. 9-2) and cut the Vent / Boot Zip Tie.

Then lift the Assembly up and off the unit. The Blower Motor and Heating Element are now easily accessable.



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10. PRESSURE SWITCH



• To remove the Pressure Switch, first remove the Top Panel as described in Section 2, then push in on the center support of the Pressure Switch Bracket and slide the Pressure Switch up and off (Fig. 10-1).

Do not attempt to calibrate the Pressure Switch, replace as a complete assembly.

TECH NOTE: Pressure Switch wiring and function:

Contact 11. Common (BL) Contact 12. Empty (BR) Contact 14. Full (W) Contact 16. Overfill (BK)





• To remove the Rear Access Panel, remove the seven (7) Phillips screws (Fig. 11-1). With the Rear Access Panel removed you have access to the following components (Fig. 11-2); Water Temperature NTC (A), Main Motor & Belt (B), Drain Hose (C) and Control Board (D).

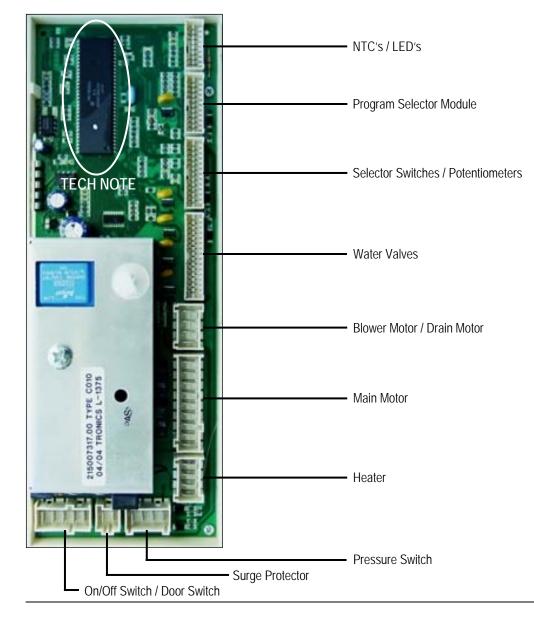
Fig. 11-2

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12. CONTROL BOARD



- To remove the Control Board, remove the two (2) T-15 Torx screws located at the rear right corner of the unit. Also remove the plastic cap (A) by prying it off with a small screwdriver (Fig. 12-1). Disconnect the wire harness connections and remove the Control Board through the rear access opening.
 - **TECH NOTE:** Replacement Control Boards <u>DO NOT</u> come with the EEPROM Chip installed. You must order the EEPROM Chip which corresponds to the Model Number being serviced separately. Remember to always order the Control Board <u>AND</u> EEPROM Chip. Use care when installing the EEPROM Chip making sure not to bend any of the contact prongs.



13. MAIN MOTOR

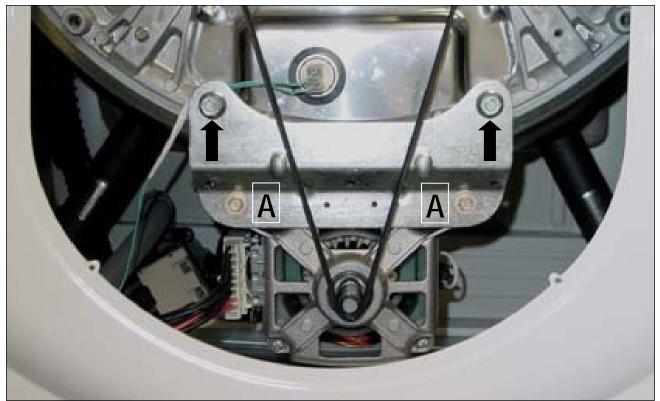
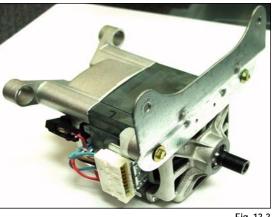


Fig. 13-1

• To remove the Main Motor, first remove the Drive Belt and then the two (2) 13 mm Motor Mounting Plate Bolts (Fig. 13-1). The Main Motor has three support points, two in the front (A) and a third located on a Rear Mounting Bracket that supports the Motor on the rear left side (Fig. 13-2). Brace the Motor as you remove the two Mounting Plate Bolts, when both bolts are clear bring the Motor out toward you freeing it from the rear support (Fig. 13-3). Remove the two (2) 8mm Bolts that attach the Plate to the Motor.



Fig. 13-2





14. FAULT CODES

A repair fault is signaled by the continuous rotating of the Program Knob and the flashing of the Door Locked LED. The Fault Code is determined by counting the sequence of individual flashes of the LED (2 flashes = F2). The LED will flash the Fault Code sequence and then delay for approximately eight (8) seconds, repeating the Fault Code sequence and eight second delay continually.

TECH NOTE: The unit can be turned off without harm and the Fault Code sequence will repeat when power is reapplied.

F1. Triac Short

Replace Control Board.

F2. Main Motor

Check Main Motor connections. Replace Main Motor. Or, replace Control Board.

F3. NTC (Water Temp) Open / Short

Check wiring continuity to Control Board. Replace NTC. Or, replace Control Board.

F4. Pressure Switch

Check wiring continuity to Control Board. Replace Pressure Switch. Or, replace Control Board.

F5. Blocked Drain Motor or Pressure Switch shorted in Empty position

Check Drain Hose. Check Drain Motor clean out for obstruction. Check voltage at Drain Motor. Check Pressure Switch wiring continuity. Replace Drain Motor / Pressure Switch. Or, replace Control Board.

F6. Program Selector

Check wiring continuity to Control Board. Replace Program Selector. Or, replace Control Board.

F7. Not Used

F8. Pressure Switch Shorted in Full Position

Check Pressure Switch wiring continuity. Or, replace Pressure Switch. Or, replace Control Board.

F9. Control Board Error

Incorrect version of Control Board or EEPROM. Change Control Board and EEPROM.

F10. Pressure Switch Shorted

Check wiring continuity to Control Board. Replace Pressure Switch. Or, replace Control Board.

F11. Drain Motor

Check wiring continuity to Control Board. Check Drain Motor clean out for obstruction. Voltage check at Drain Motor. Check Pressure Switch. Replace Drain Motor. Or, replace Control Board.

F12. Not Used

F13 - F16 Apply Only to AWD 120

F13. NTC (Dryer Temp) Open / Short

Check wiring continuity to Control Board. Replace NTC. Or, replace Control Board.

F14. Dryer Heating Element is Open

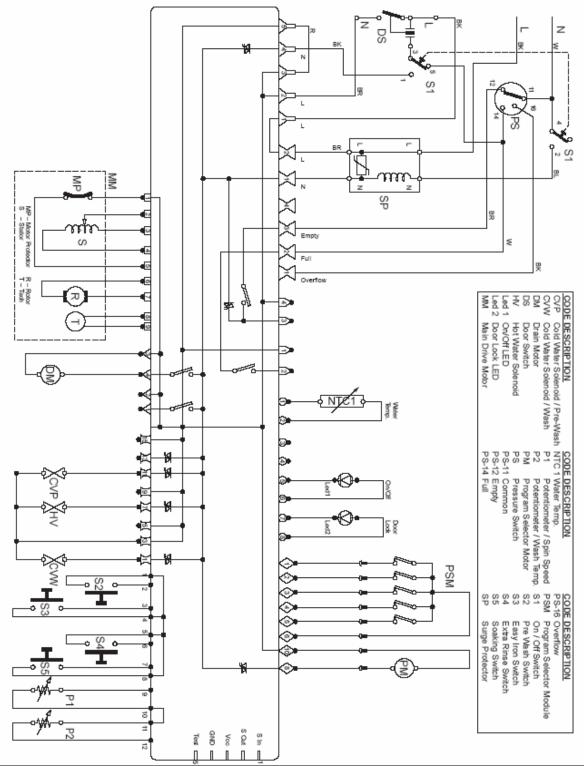
Check Dryer Heating Element continuity. Check wiring from Element to Control Board. Replace Heating Element. Or, replace Control Board

F15. Dryer Heating Element Relay Shorted

Check Dryer Heating Element continuity. Check wiring from Element to Control Board. Replace Control Unit.

F16. Not Used

15. SCHEMATIC AW 120 / AW 122



15. SCHEMATIC AWD 120 / AWD 121 / AWD 129

