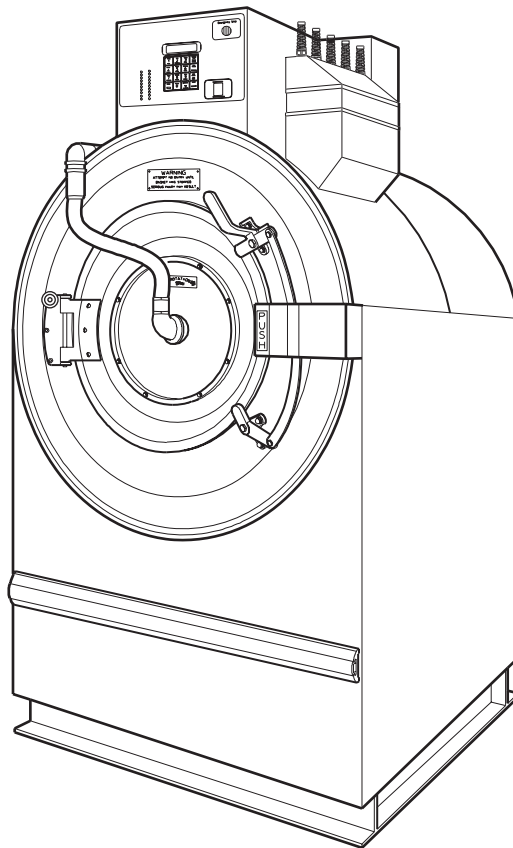


Washer-Extractor

Pocket Hardmount
UW35, UW50, UW60,
UW65, UW85 and UW125

2-speed, 3-speed and 4-speed

Refer to Page 5 for Model Numbers



PHM1380C

— Troubleshooting —

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Section 1

Safety Information

Throughout this manual and on machine decals, you will find precautionary statements (“CAUTION,” “WARNING” and “DANGER”) 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 an imminently hazardous situation that, if not avoided, will cause severe personal injury or death.

▲ WARNING

Warning indicates a hazardous situation that, if not avoided, could cause severe personal injury or death.

▲ CAUTION

Caution indicates a hazardous situation that, if not avoided, may cause minor or moderate personal injury or property damage.

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.

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

	WARNING
<ul style="list-style-type: none">• 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.	
<small>W006R2</small>	



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:

W023E

1. Read all instructions before using the washer-extractor.
2. Refer to the GROUNDING INSTRUCTIONS in the INSTALLATION manual (supplied with your washer-extractor) for the proper grounding of the washer-extractor.
3. Do not wash textiles that have been previously cleaned in, washed in, soaked in or spotted with gasoline, dry-cleaning 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-extractor, 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-extractor. Close supervision of children is necessary when the washer-extractor is used near children.
7. Before the washer-extractor is removed from service or discarded, remove the door to the washing compartment.
8. Do not reach into the washer-extractor if the wash basket is moving.
9. Do not install or store the washer-extractor where it will be exposed to water and/or weather.
10. Do not tamper with the washer-extractor's controls.
11. Do not repair or replace any part of the washer-extractor 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-extractor to an electrical power source.
13. Use the washer-extractor only for its intended purpose, washing clothes.
14. ALWAYS disconnect the washer-extractor from its electrical supply before attempting any service.
15. Install the washer-extractor 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.
16. 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-extractor. These flammable substances may cause the fabric to ignite.
17. Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
18. Keep the washer-extractor in good condition. Bumping or dropping the washer-extractor can damage its safety features. If this occurs, have the washer-extractor checked by a qualified service person.
19. Replace worn power cords and/or loose plugs.
20. 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.
21. The loading door MUST BE CLOSED any time the washer-extractor is to fill, tumble or spin. DO NOT by-pass the loading door switch and permit the washer-extractor to operate with the loading door open.
22. 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).
23. Always follow the fabric care instructions supplied by the textile manufacturer.
24. Never operate the washer-extractor with any guards and/or panels removed.
25. DO NOT operate the washer-extractor with missing or broken parts.
26. DO NOT by-pass any safety devices.
27. Failure to install, maintain and/or operate this washer-extractor 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-extractor.

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

Safety Information

Locating an Authorized Servicer

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

Warranty service must be performed by an authorized technician, using authorized factory parts. If service is required after the warranty expires, Alliance Laundry Systems also recommends contacting an authorized technician and using authorized factory parts.

Section 2

Introduction

Customer Service

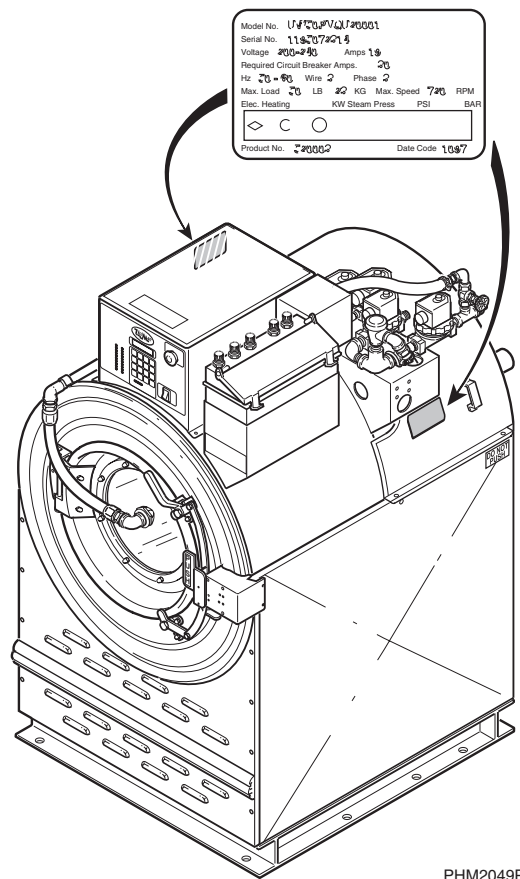
Alliance Laundry Systems is not responsible for personal injury or property damage resulting from improper service. Review all service information before beginning repairs.

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, call (920) 748-3121.

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.



Introduction

Model Identification

Information in this manual is applicable to these washer-extractors.*

UW35P2	UW50P2	UW60P2	UW65P4	UW85P3	UW125P4
UW35P3	UW50P3	UW60P3		UW85P4	
UW35P4	UW50P4				

Section 3

Troubleshooting



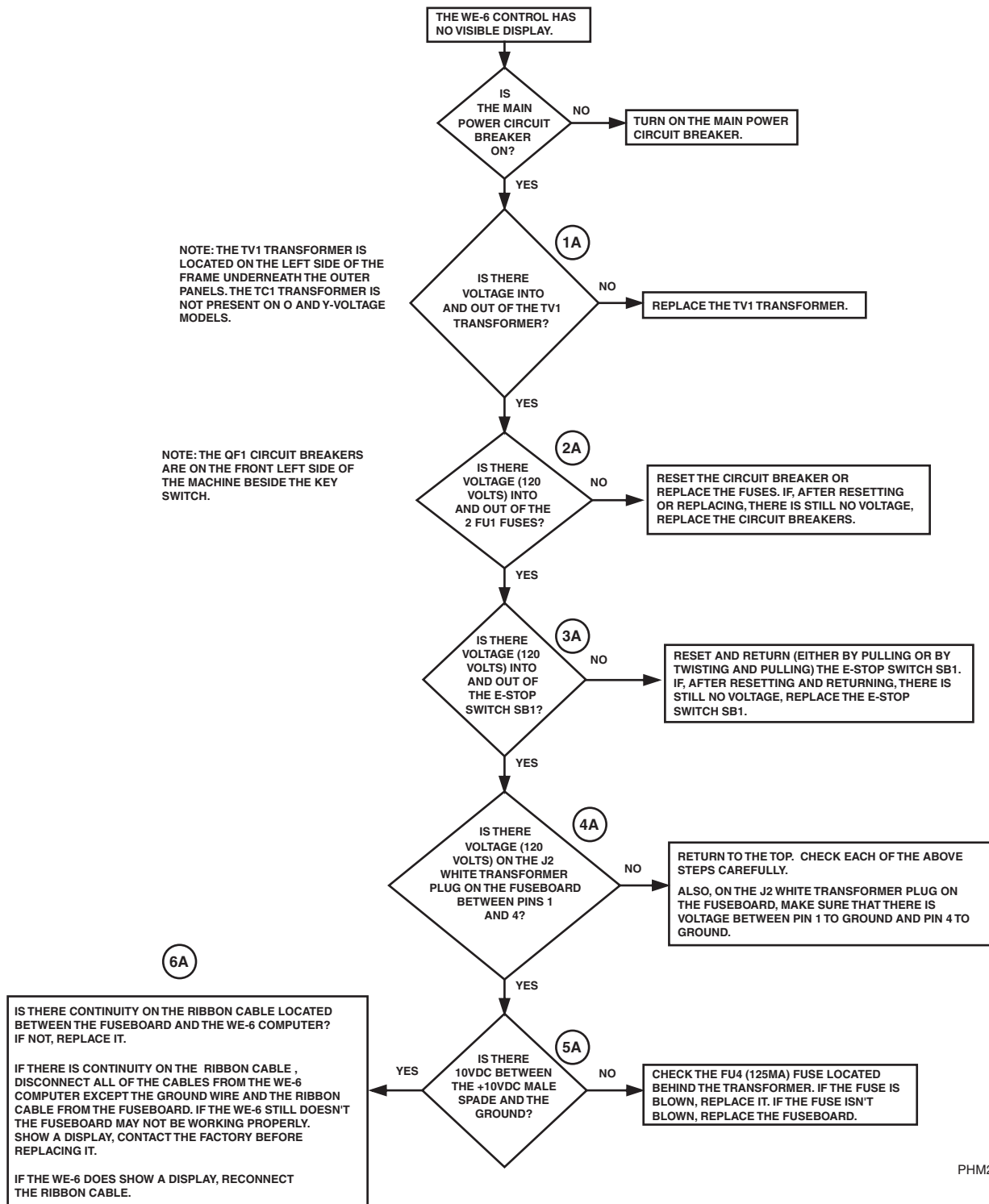
WARNING

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

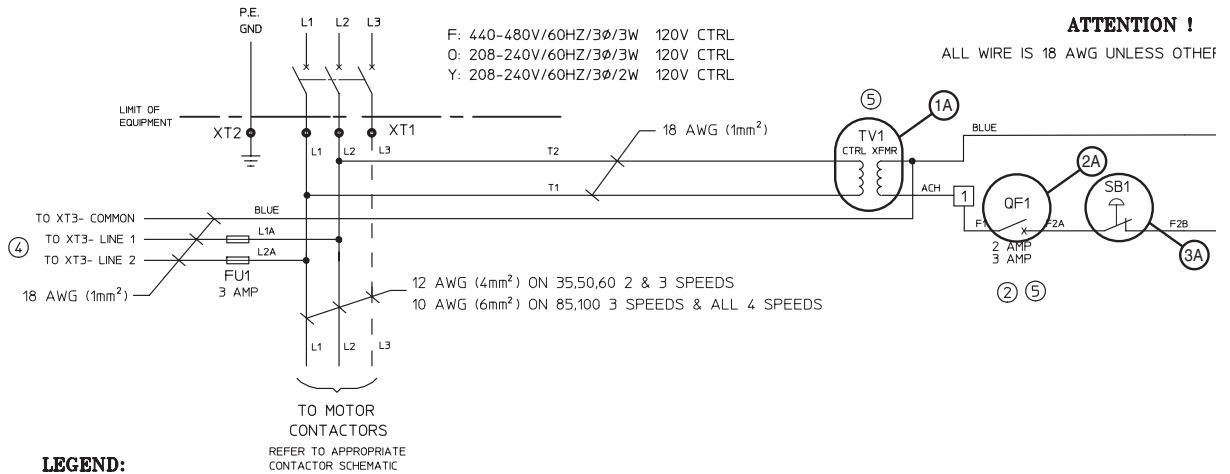
1. WE-6 Control Has No Visible Display (120 Volt Control)



PHM2056S

Please refer to the following 2 pages for wiring diagram information.

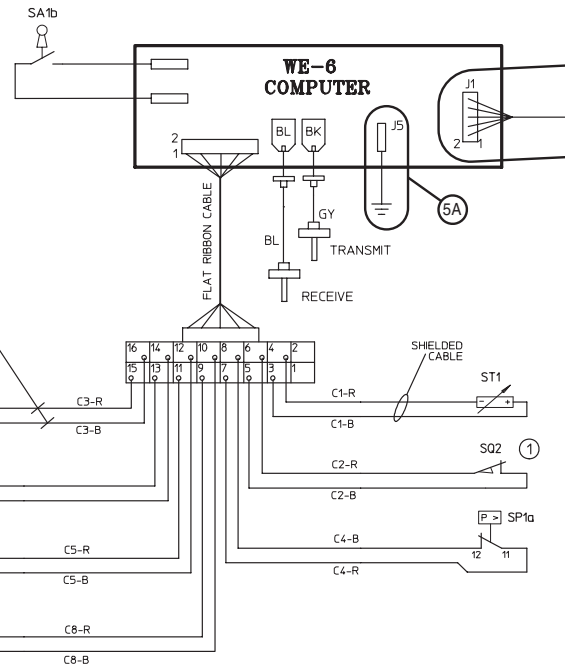
WE-6 Control Has No Visible Display (120 Volt Control) (Sheet 1 of 2)



LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- S01 = SWITCH MAGNETIC DOOR CLOSED
- S02 = SWITCH OUT-OF-BALANCE DETECTION
- S03 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN

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NOTES:

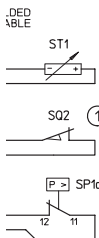
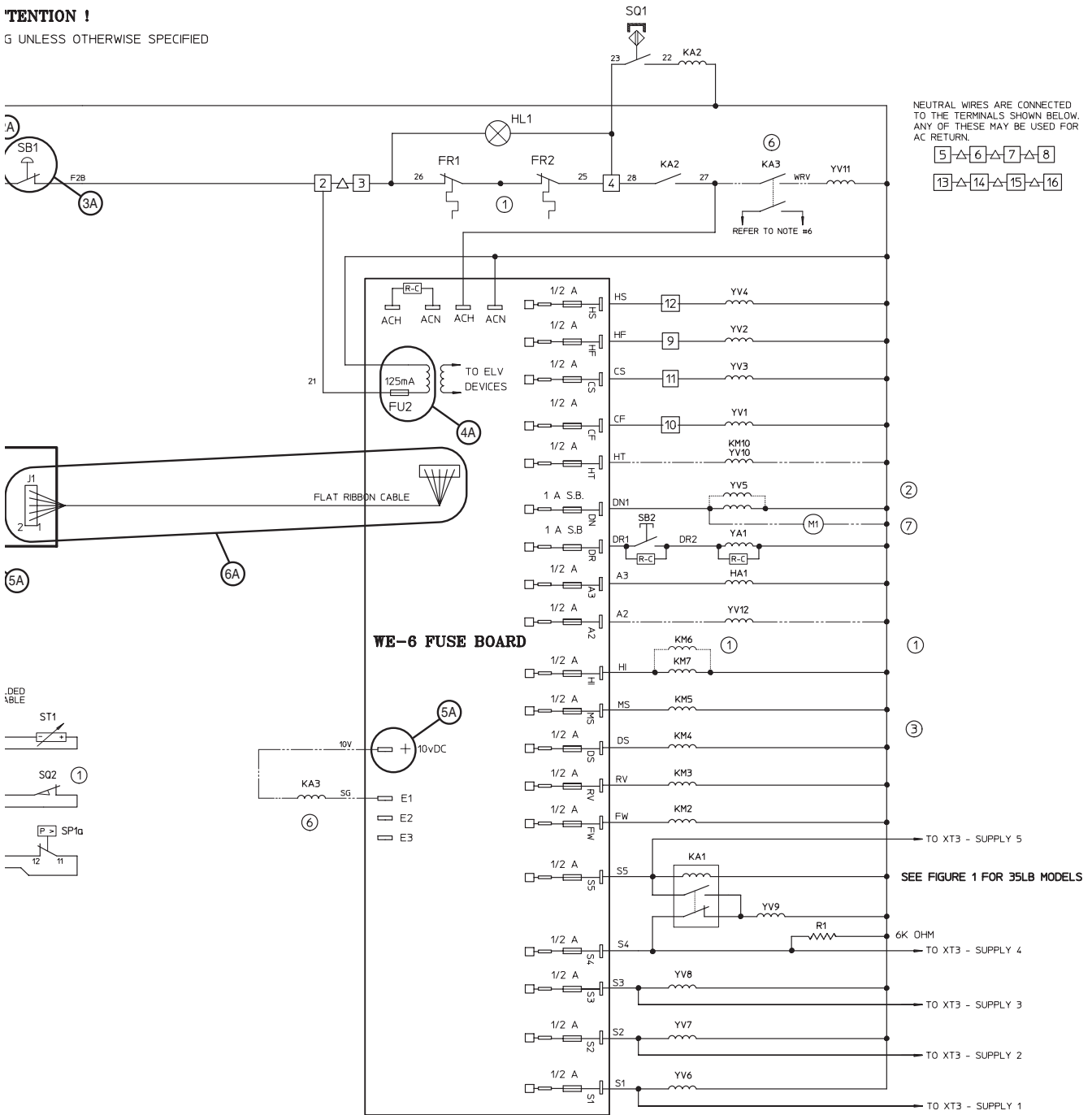
- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. S02 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAIL USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (RE)
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED

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

WE-6 Control Has No Visible Display (120 Volt Control) (Sheet 2 of 2)

ATTENTION !

G UNLESS OTHERWISE SPECIFIED



DRAINS.
RAINS.

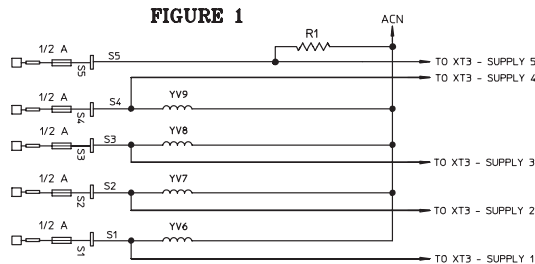
240V.

31896 FOR DETAILS.
MP BREAKER (REFER TO NOTE 2).

ACTIVATE
ARRANGEMENT.

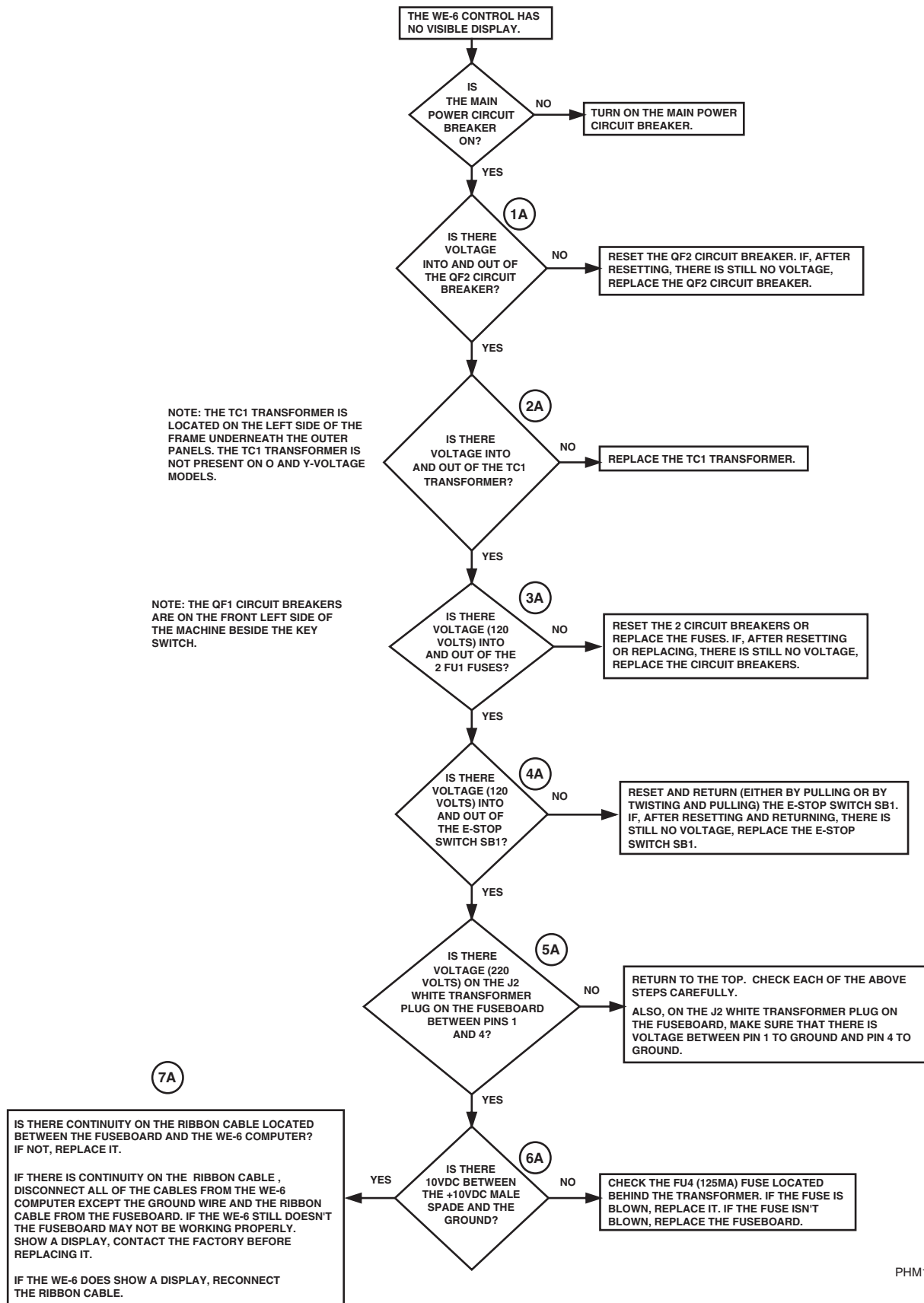
SPECIALLY ORDERED.

FIGURE 1



PHM2057S
604842M

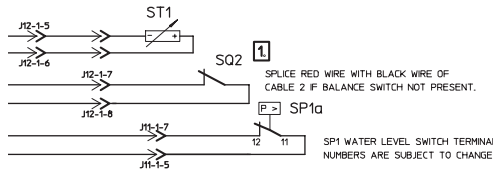
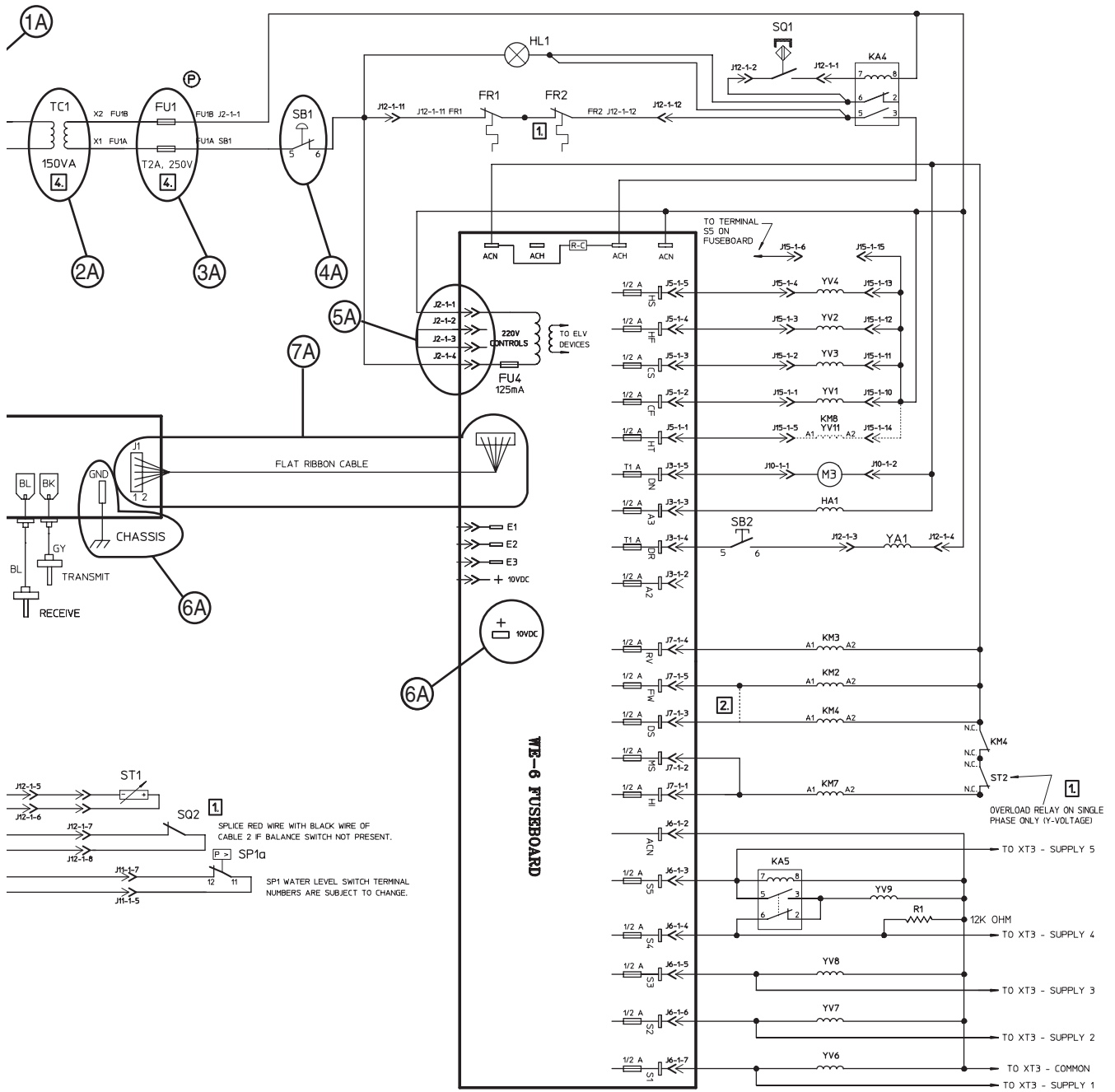
2. WE-6 Control Has No Visible Display (220 Volt Control)



PHM1986S

Please refer to the following 2 pages for wiring diagram information.

WE-6 Control Has No Visible Display (220 Volt Control) (Sheet 2 of 2)

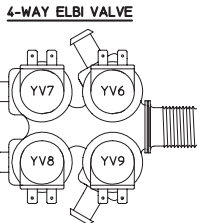


PEEDS.
IS.
ONLY.

.1 OF KM2 (FWD), ALONG WITH THE WIRE FROM 'FW',
M4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

EHOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

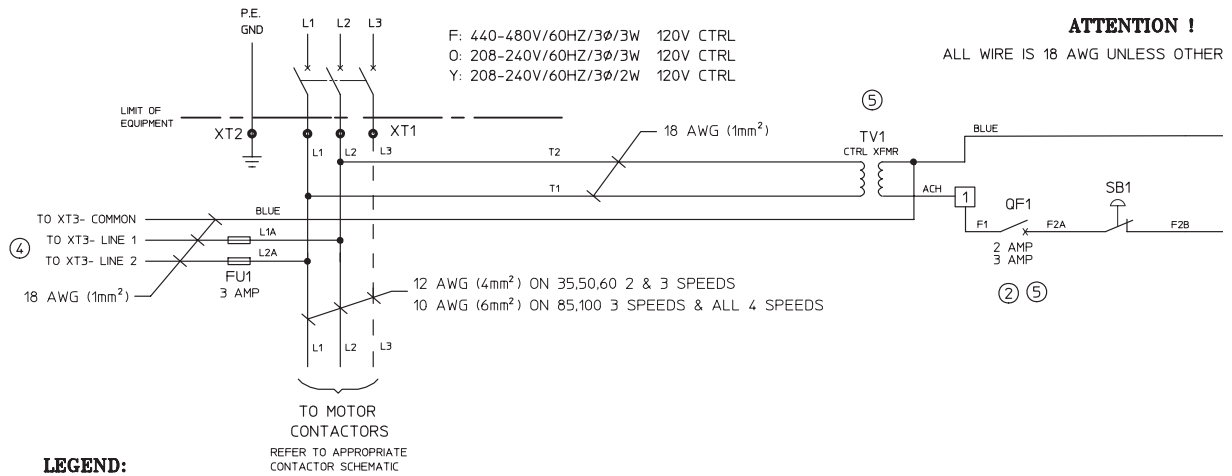
(QF2) ARE NOT PRESENT ON 0- & Y-VOLTAGE MACHINES.
1 & L2 ON 0- & Y-VOLTAGE MACHINES.
N DETAILS OF CONTROL TRANSFORMER.



PHM1952S
0604842 (P)

Please refer to the following 2 pages for wiring diagram information.

No Fill Analysis (120 Volt Control) (Sheet 1 of 2)



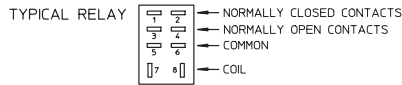
LEGEND:

△ = TERMINAL STRIP JUMPER (TERMINAL STRIP JUMPERS MAY BE USED IN VARIOUS PLACES NOT SHOWN ON SCHEMATIC)

② = TERMINAL STRIP, TERMINAL #2

R-C = RESISTOR CAPACITOR FILTER NETWORK

C4-B = CABLE #4, BLACK WIRE

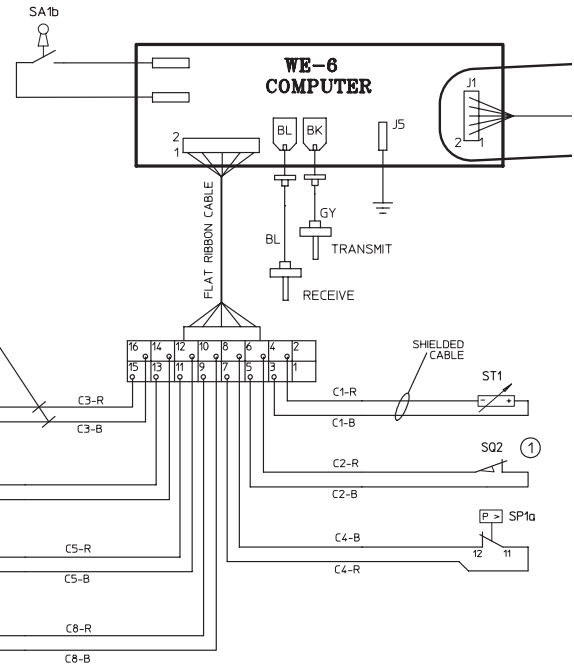


ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT TERMINAL POSITIONS ARE THE SAME.

LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- SQ1 = SWITCH MAGNETIC DOOR CLOSED
- SQ2 = SWITCH OUT-OF-BALANCE DETECTION
- SQ3 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN

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NOTES:

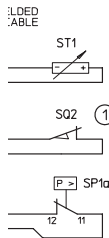
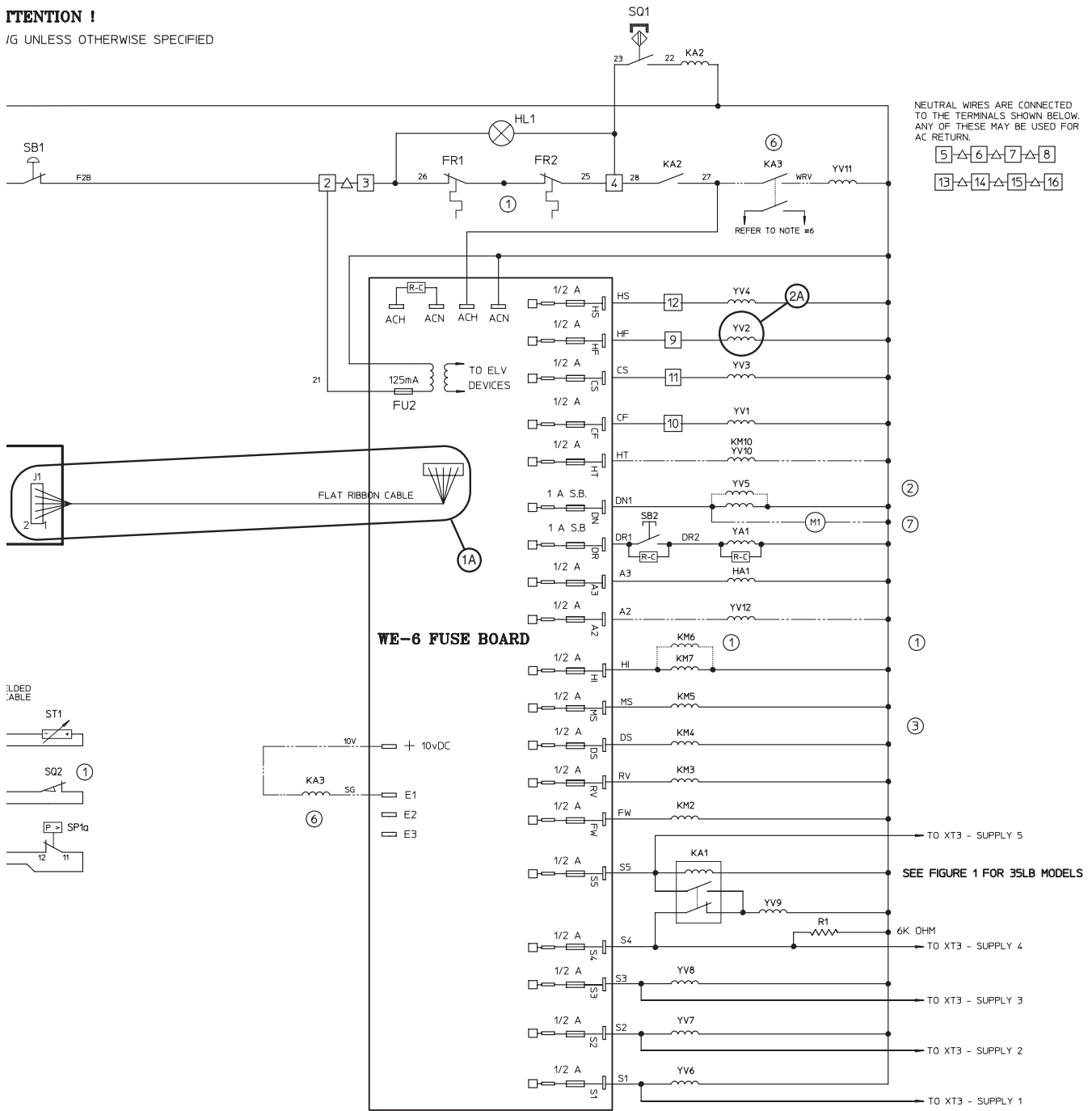
- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAIL USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (RE)
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED

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

No Fill Analysis (120 Volt Control) (Sheet 2 of 2)

ATTENTION !

1/2 A UNLESS OTHERWISE SPECIFIED



TO DRAINS.
TO DRAINS.

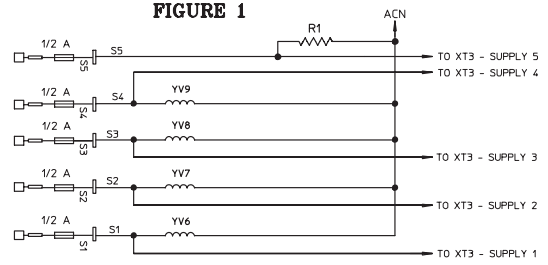
D.

240V.

01896 FOR DETAILS.
AMP BREAKER (REFER TO NOTE 2).

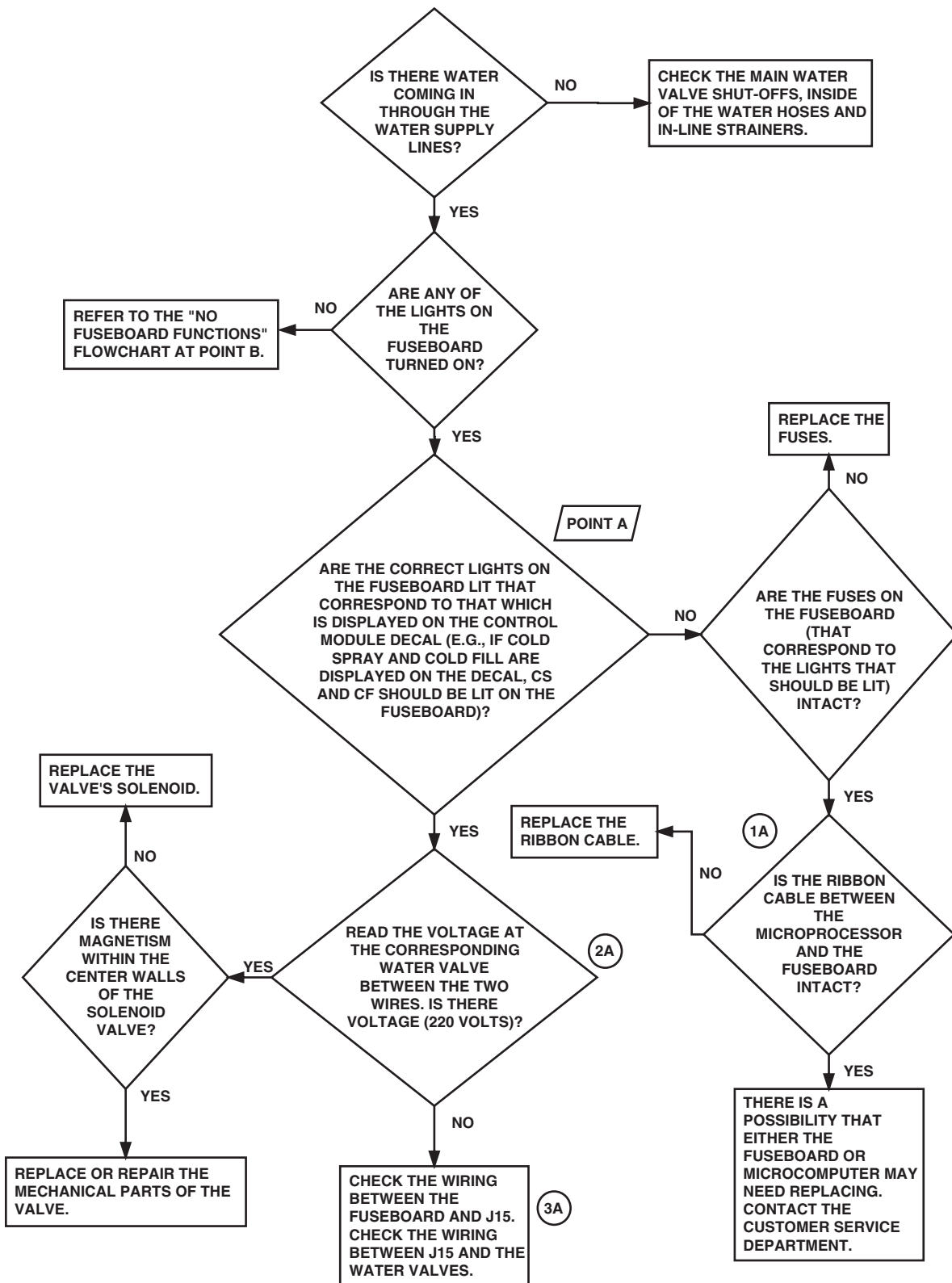
TO ACTIVATE
T ARRANGEMENT.
SPECIALLY ORDERED.

FIGURE 1



PHM2059S
604842M

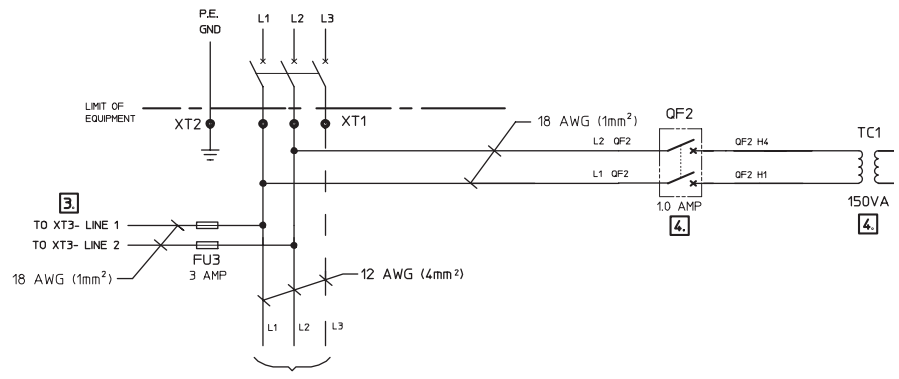
4. No Fill Analysis (220 Volt Control)



PHM1922S

Please refer to the following 2 pages for wiring diagram information.

No Fill Analysis (220 Volt Control) (Sheet 1 of 2)



SCHEMATIC !
CONTROL TX (635635)

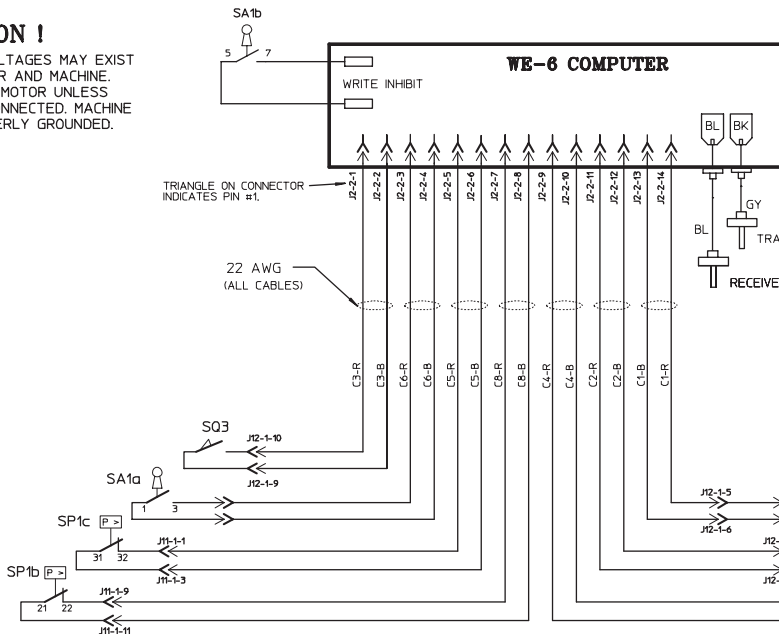
TO MOTOR CONTACTORS
REFER TO APPROPRIATE CONTACTOR SCHEMATIC

CAUTION !

DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

LEGEND

- OPTIONAL CONNECTIONS
- CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- QF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- SO1 - SWITCH, MAGNETIC DOOR CLOSED
- SO2 - SWITCH, OUT-OF-BALANCE
- SO3 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT

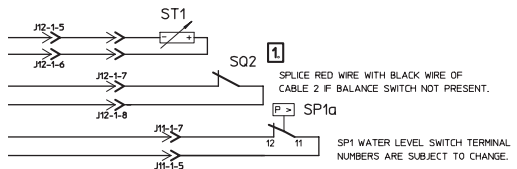
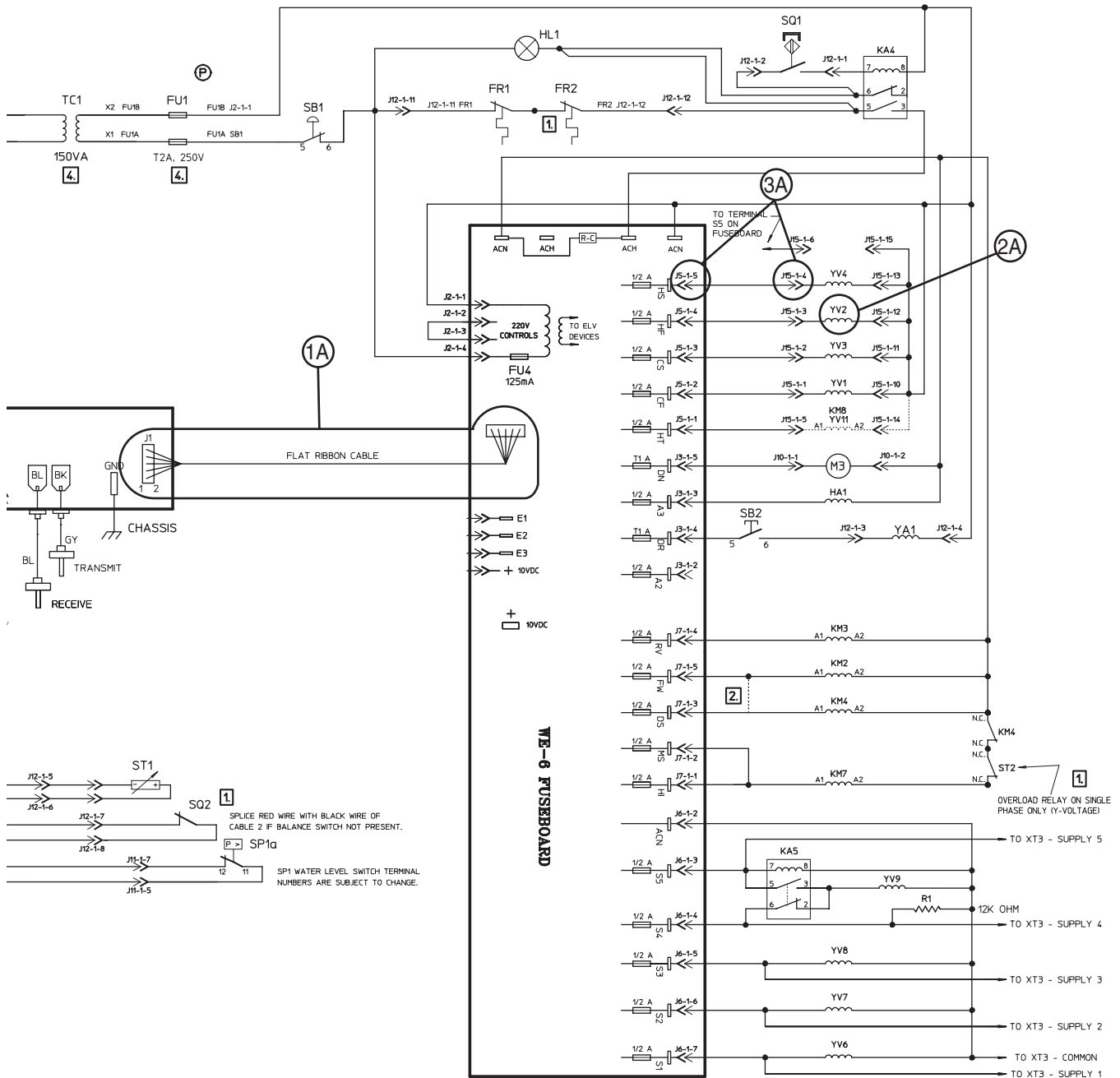


NOTES:

1. SO2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS.
FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
2. CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWI ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSO
3. OMIT WIRES TO "XT3-LINE1", "XT3-LINE2" & FUSEHOLDER FU3
4. CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (QF2) ARE NOT THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON O-REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF

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

No Fill Analysis (220 Volt Control) (Sheet 2 of 2)

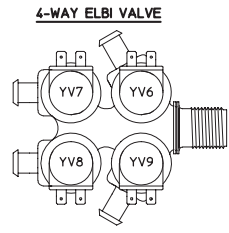


FEEDS.
IS.
ONLY.

1 OF KM2 (FWD), ALONG WITH THE WIRE FROM "FW",
M4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

HOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

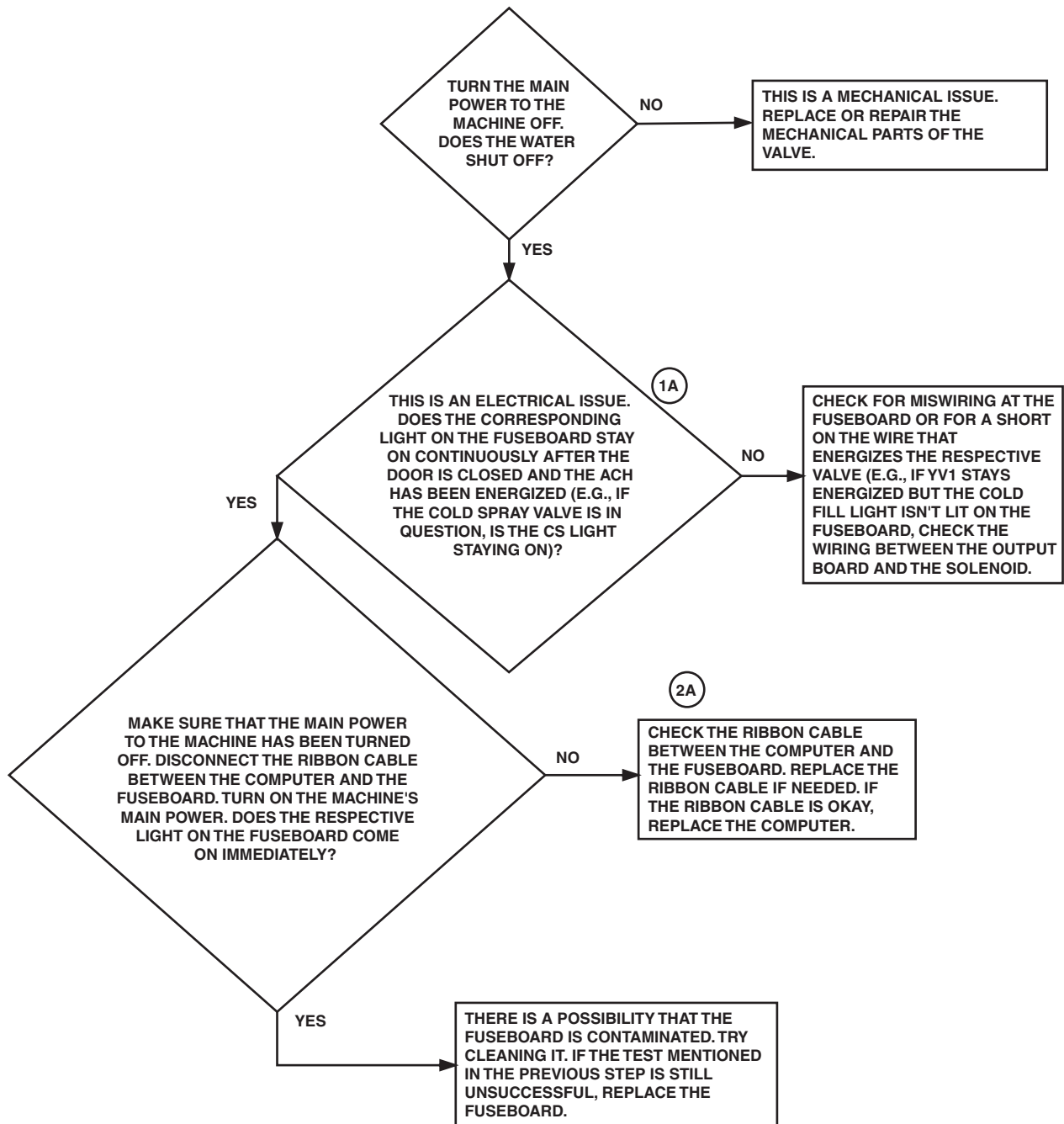
(QF2) ARE NOT PRESENT ON 0- & Y-VOLTAGE MACHINES.
1 & L2 ON 0- & Y-VOLTAGE MACHINES.
V DETAILS OF CONTROL TRANSFORMER.



PHM1953S
0604842 (P)

5. Water Runs Continuously into the Washer-Extractor (120 Volt Control) (Either when the machine is in cycle or not)

Note: This information applies to the four main fill valves as well as the 4-way supply valves. The first task in this process is to determine which valve is staying on. If it is one of the four main valves (i.e., hot spray, hot fill, cold spray or cold fill), this may be done by individually shutting off the water supply to each valve. If it is a supply valve that is staying open, find the location in the dry supply box where the water is flushing into and follow the hose back to the solenoid. Once the valve has been identified, proceed as follows:

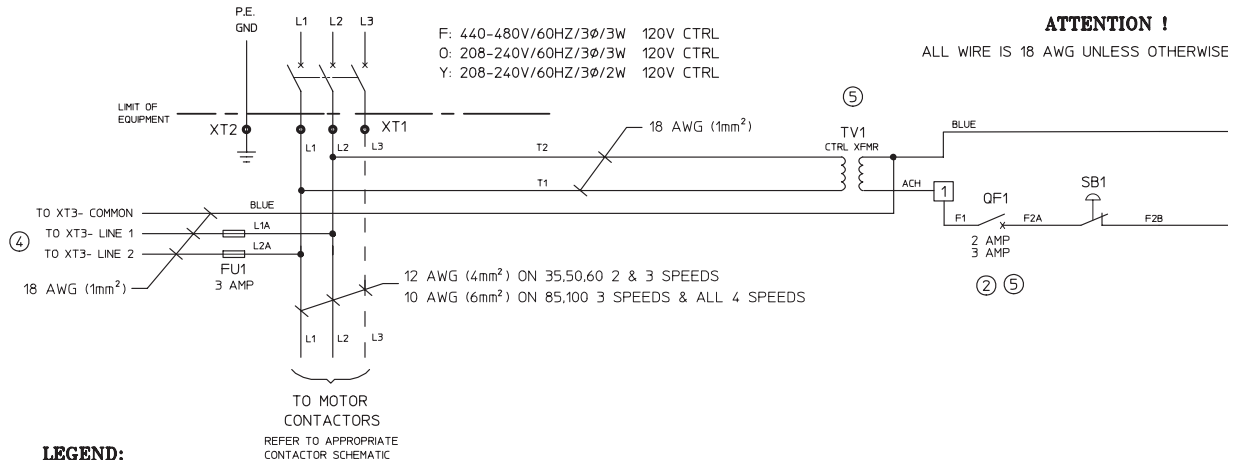


PHM2060S

Please refer to the following 2 pages for wiring diagram information.

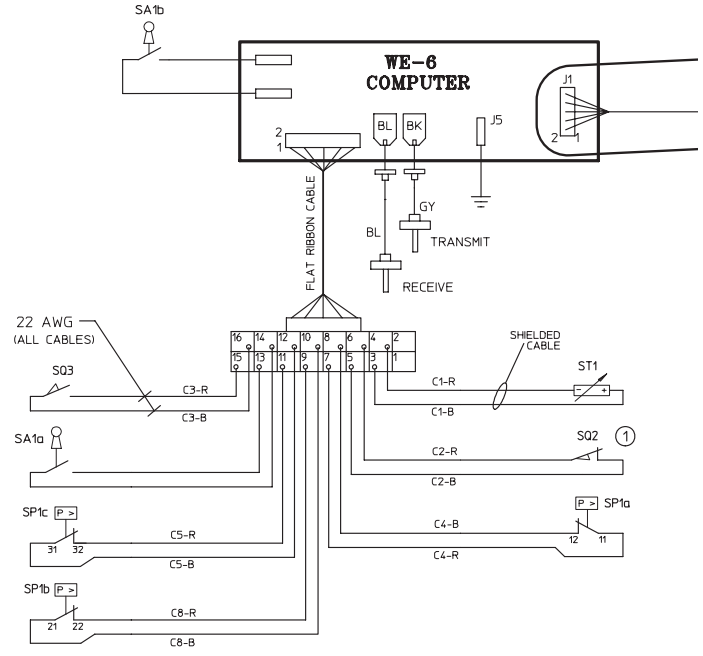
Troubleshooting

Water Runs Continuously into the Washer-Extractor (120 Volt Control) (Either when the machine is in cycle or not) (Sheet 1 of 2)



LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- SQ1 = SWITCH MAGNETIC DOOR CLOSED
- SQ2 = SWITCH OUT-OF-BALANCE DETECTION
- SQ3 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN



NOTES:

- 1 KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- 2 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- 3 JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- 4 OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- 5 CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAILS. USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (REFER TO CONTACTOR SCHEMATIC FOR DETAILS).
- 6 WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- 7 WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED.

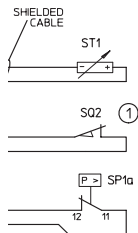
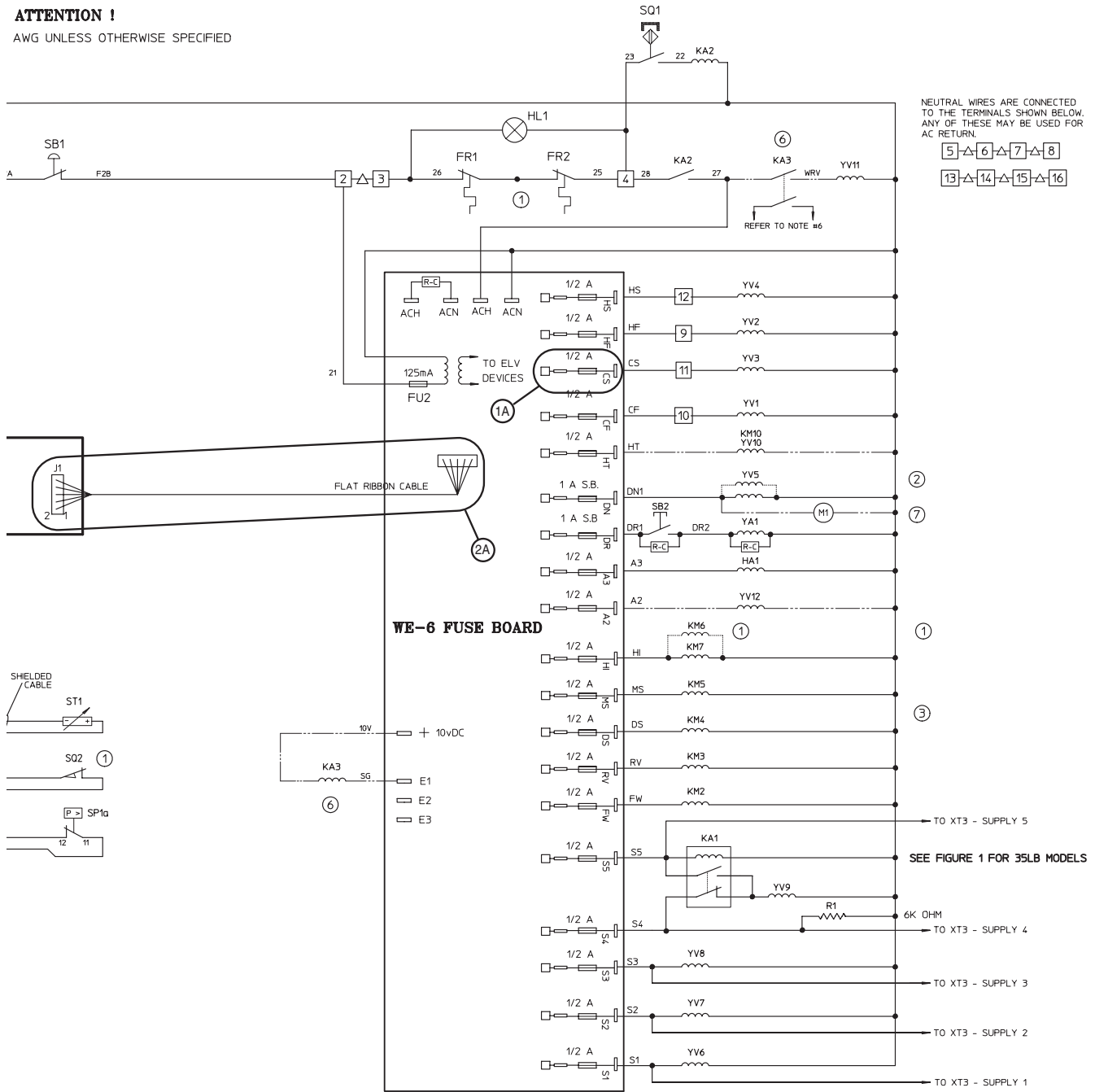
604842.e | H | 1 | drawings - ARCHIVED. Plotted by 'shannon' on 25-Nov-2002 10:25:52

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

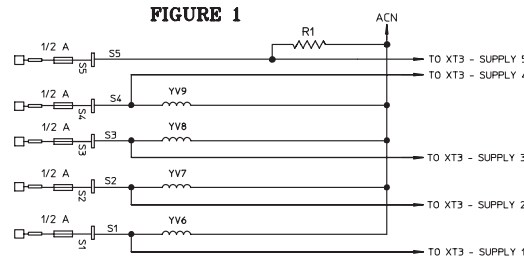
Water Runs Continuously into the Washer-Extractor (120 Volt Control) (Either when the machine is in cycle or not) (Sheet 2 of 2)

ATTENTION !

AWG UNLESS OTHERWISE SPECIFIED

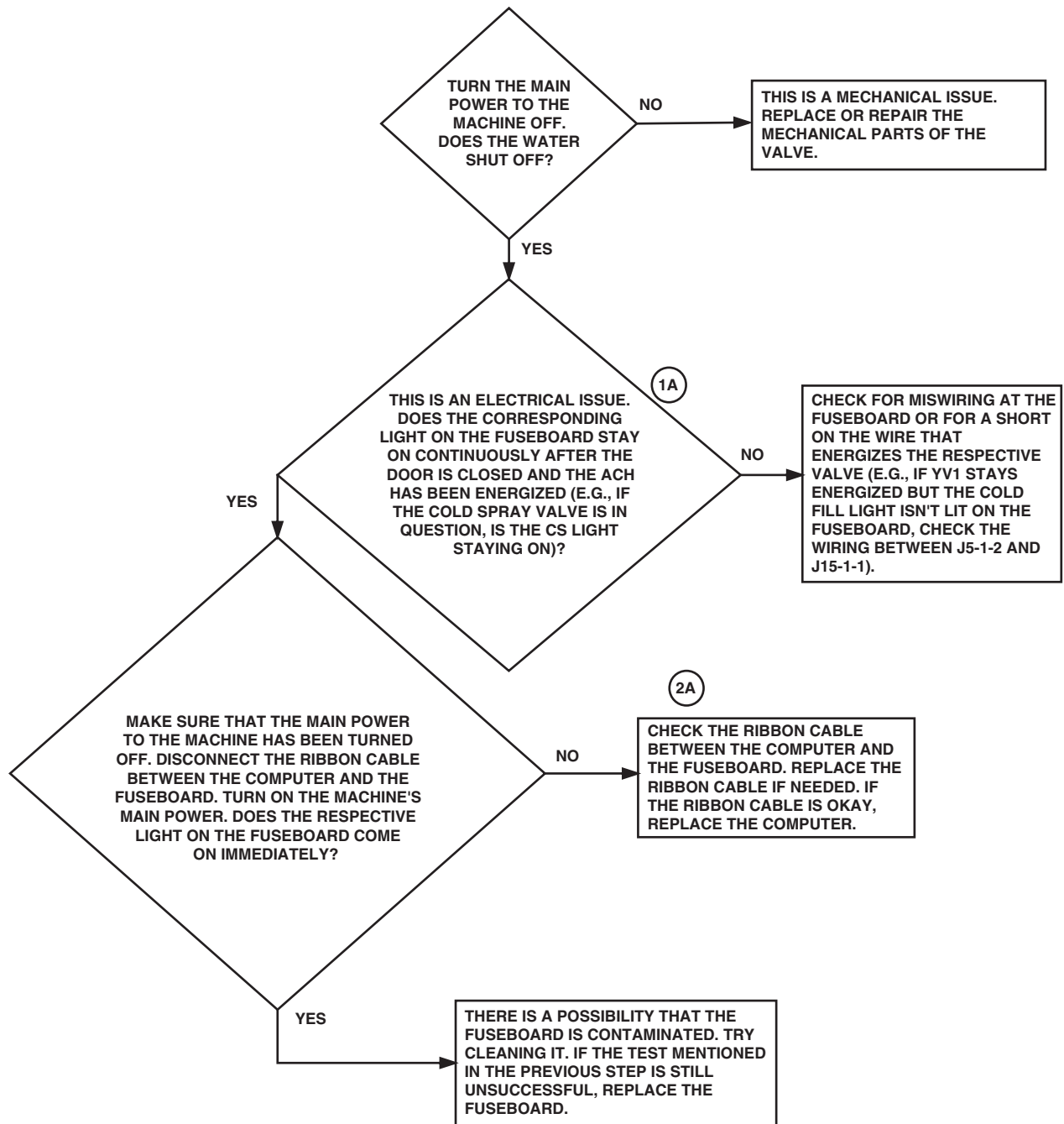


- 1. TO ACTIVATE CONTACT ARRANGEMENT.
- 2. SPECIALLY ORDERED.
- 3. AMP BREAKER (REFER TO NOTE 2).
- 4. #601896 FOR DETAILS.
- 5. 240V.
- 6. JARD.
- 7. TYPED DRAINS.
- 8. UN-TYPED DRAINS.



6. Water Runs Continuously into the Washer-Extractor (220 Volt Control) (Either when the machine is in cycle or not)

Note: This information applies to the four main fill valves as well as the 4-way supply valves. The first task in this process is to determine which valve is staying on. If it is one of the four main valves (i.e., hot spray, hot fill, cold spray or cold fill), this may be done by individually shutting off the water supply to each valve. If it is a supply valve that is staying open, find the location in the dry supply box where the water is flushing into and follow the hose back to the solenoid. Once the valve has been identified, proceed as follows:

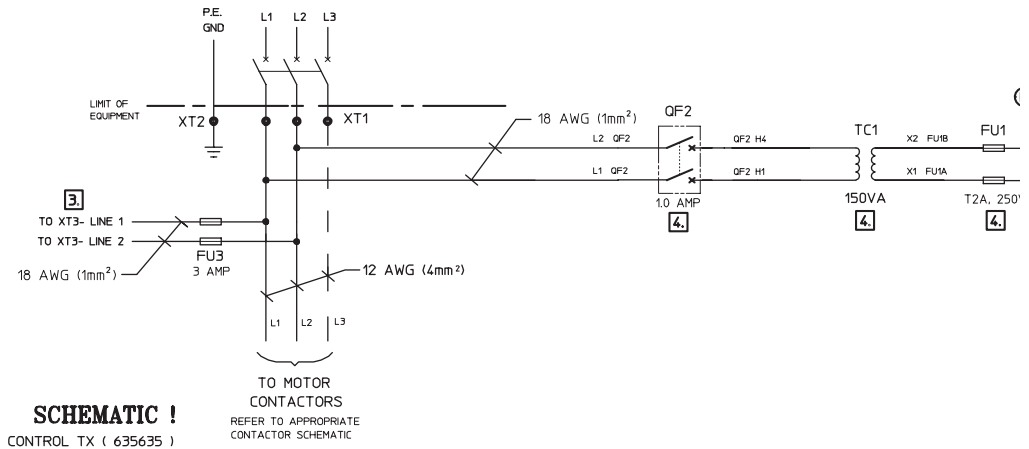


PHM1954S

Please refer to the following 2 pages for wiring diagram information.

Troubleshooting

Water Runs Continuously into the Washer-Extractor Extractor (220 Volt Control) (Either when the machine is in cycle or not) (Sheet 1 of 2)

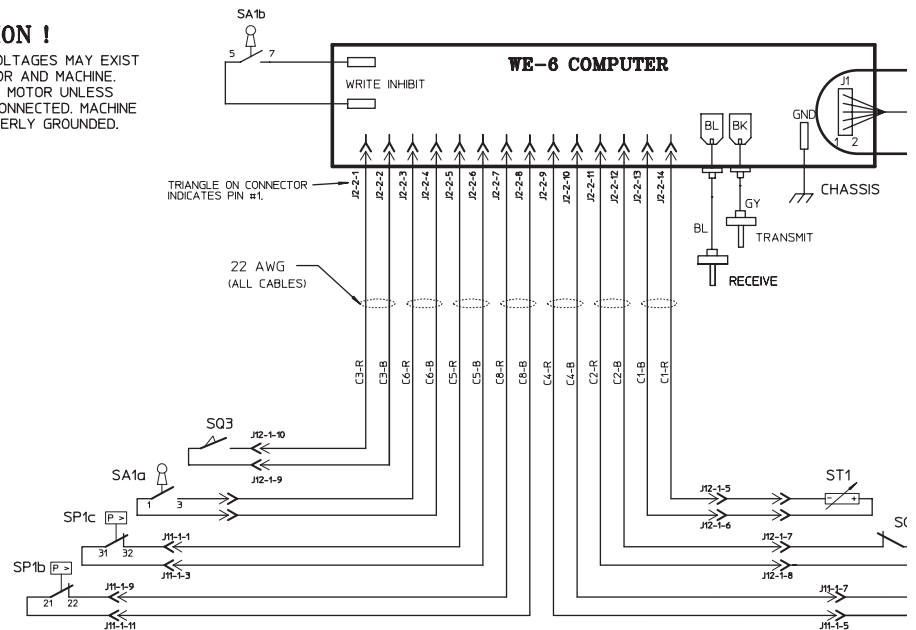


CAUTION !

DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

LEGEND

- OPTIONAL CONNECTIONS
- CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACCOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- OF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- SO1 - SWITCH, MAGNETIC DOOR CLOSED
- SO2 - SWITCH, OUT-OF-BALANCE
- SO3 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT

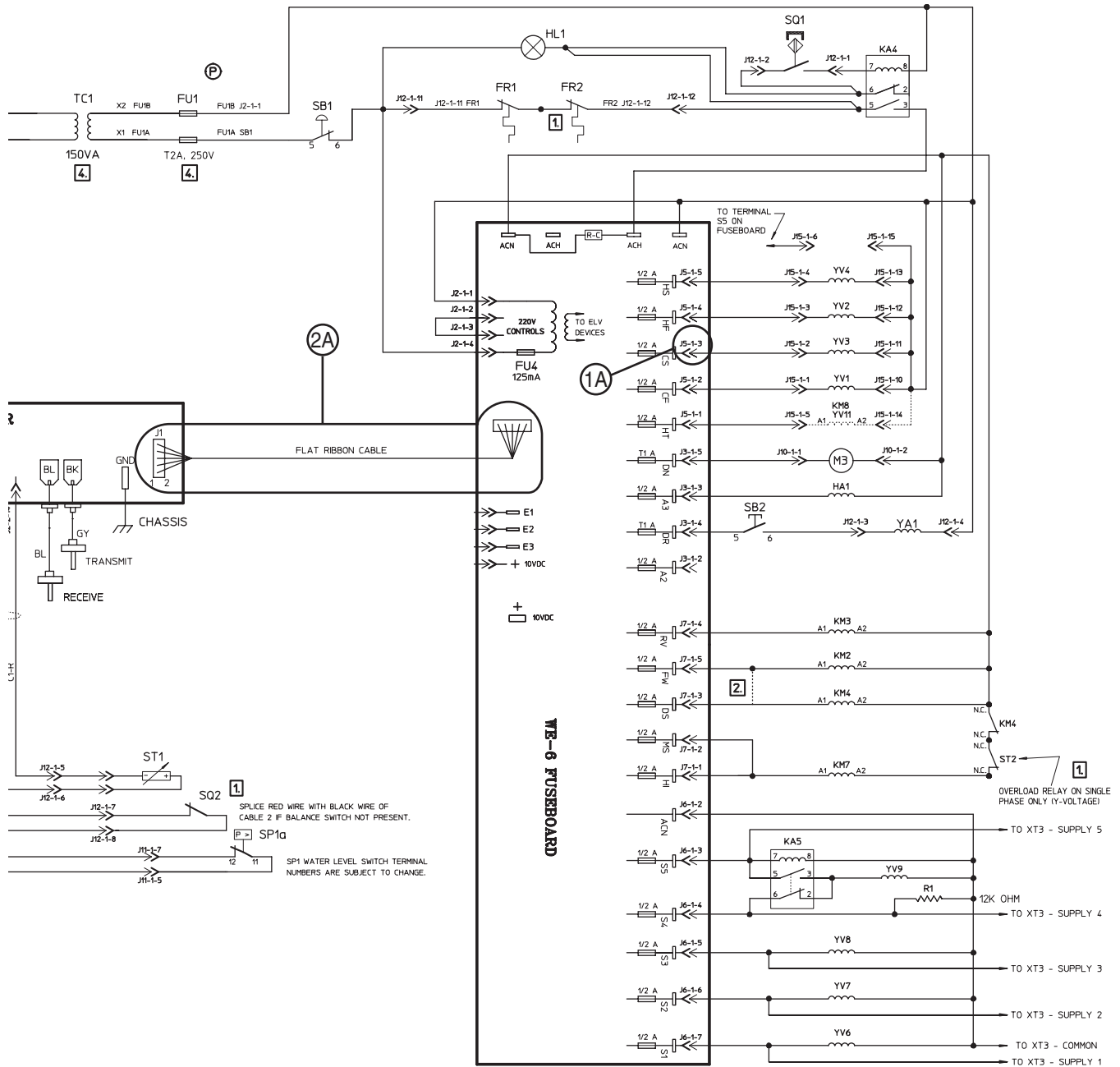


NOTES:

1. SO2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS.
FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE MAI
2. CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH TH ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WHEN
3. OMIT WIRES TO "XT3-LINE1", "XT3-LINE2" & FUSEHOLDER FU3 ON MACHINES WIT
4. CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (OF2) ARE NOT PRESENT ON 0- THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON 0- & Y-VOLTAGE MAI REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANSF

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

Water Runs Continuously into the Washer-Extractor (220 Volt Control) (Either when the machine is in cycle or not) (Sheet 2 of 2)



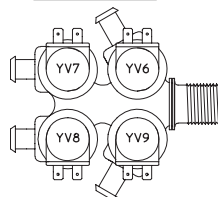
SPEEDS.
E.S.
E ONLY.

A1 OF KM2 (FWD), ALONG WITH THE WIRE FROM 'FW',
KM4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

USE HOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

L1, (OF2) ARE NOT PRESENT ON O- & Y-VOLTAGE MACHINES.
L1 & L2 ON O- & Y-VOLTAGE MACHINES.
ION DETAILS OF CONTROL TRANSFORMER.

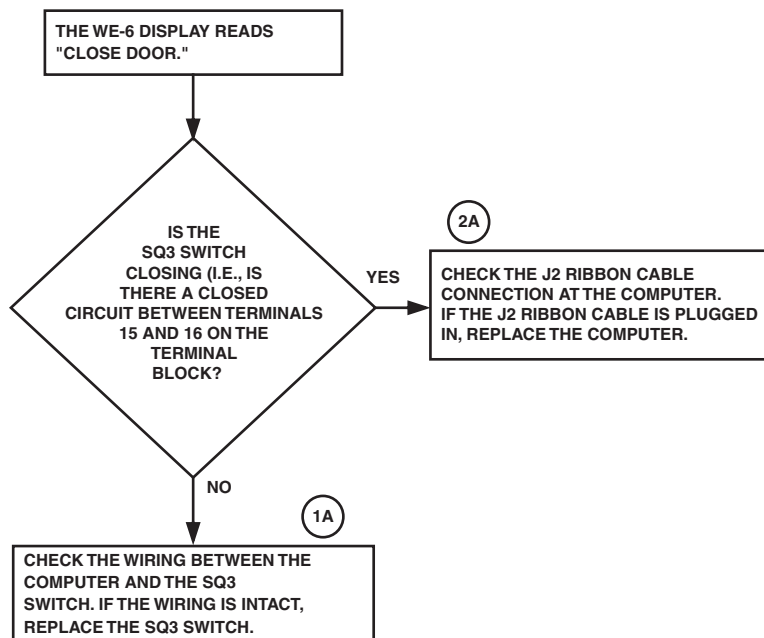
4-WAY ELBI VALVE



PHM1955S
0604842 (P)

7. Door Lock Switch Analysis (120 Volt Control)

Symptom: The WE-6 Display Reads "Close Door"

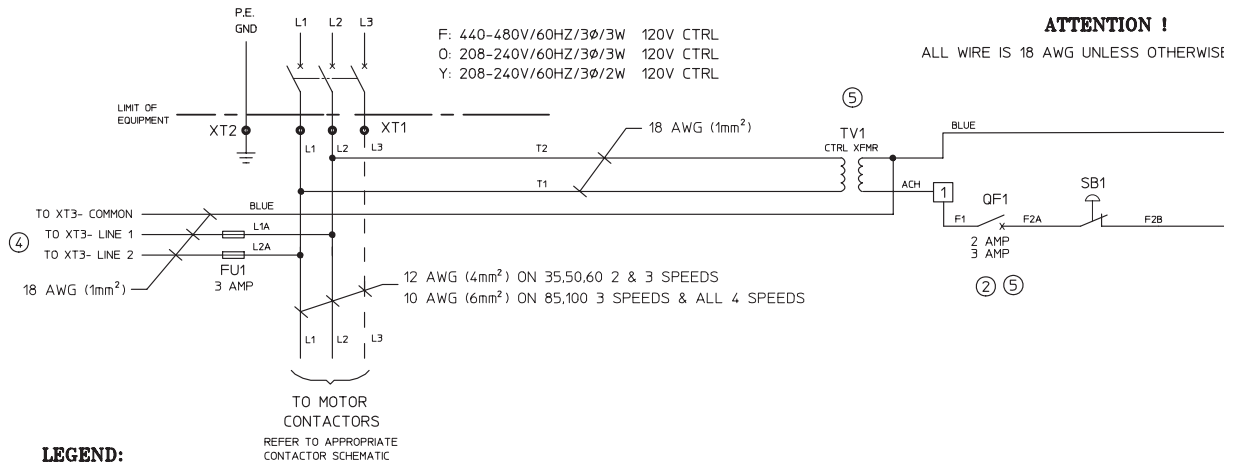


PHM2062S

Please refer to the following 2 pages for wiring diagram information.

Troubleshooting

Door Lock Switch Analysis (120 Volt Control) The WE-6 Display Reads "Close Door" (Sheet 1 of 2)



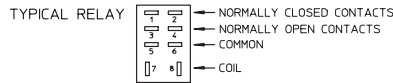
LEGEND:

—△— = TERMINAL STRIP JUMPER (TERMINAL STRIP JUMPERS MAY BE USED IN VARIOUS PLACES NOT SHOWN ON SCHEMATIC)

② = TERMINAL STRIP, TERMINAL #2

R-C = RESISTOR CAPACITOR FILTER NETWORK

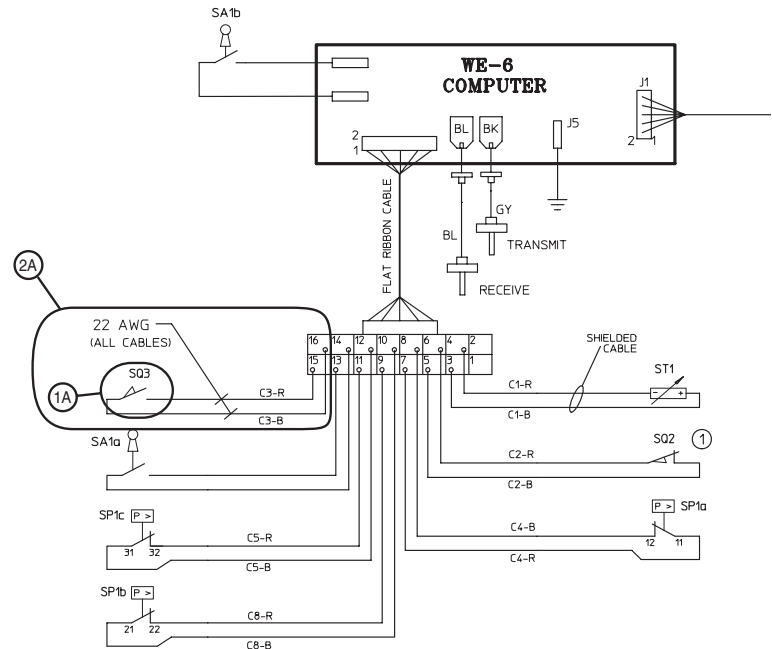
C4-B = CABLE #4, BLACK WIRE



ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT TERMINAL POSITIONS ARE THE SAME.

LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- SQ1 = SWITCH MAGNETIC DOOR CLOSED
- SQ2 = SWITCH OUT-OF-BALANCE DETECTION
- SQ3 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN



NOTES:

- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAILS. USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (REFER TO TRANSFORMER SCHEMATIC FOR DETAILS).
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED.

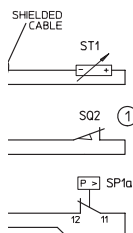
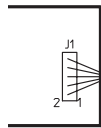
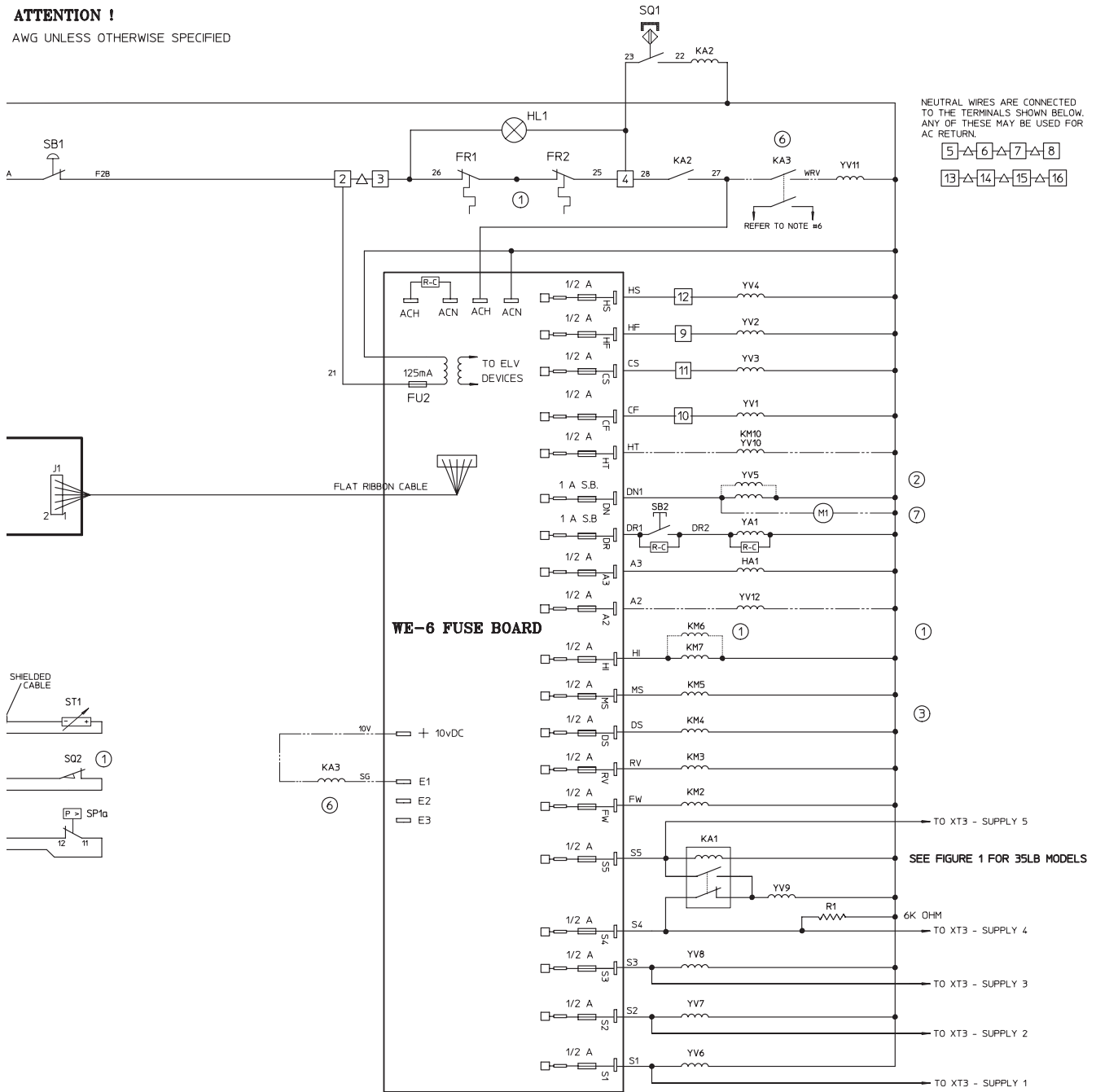
604842.e | M | | | drawings - ARCHIVED. Plotted by 'shannon' on 25-Nov-2002 10:25:52

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

Door Lock Switch Analysis (120 Volt Control) The WE-6 Display Reads "Close Door" (Sheet 2 of 2)

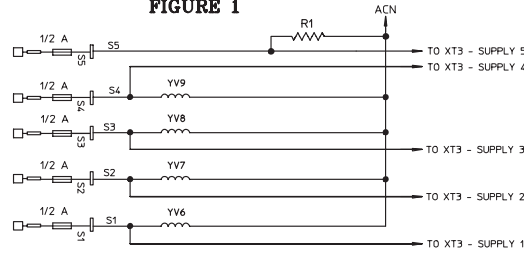
ATTENTION !

AWG UNLESS OTHERWISE SPECIFIED



WE-6 FUSE BOARD

FIGURE 1



TED DRAINS.
D DRAINS.

JARD.

IAN 240V.

#601896 FOR DETAILS.
3 AMP BREAKER (REFER TO NOTE 2).

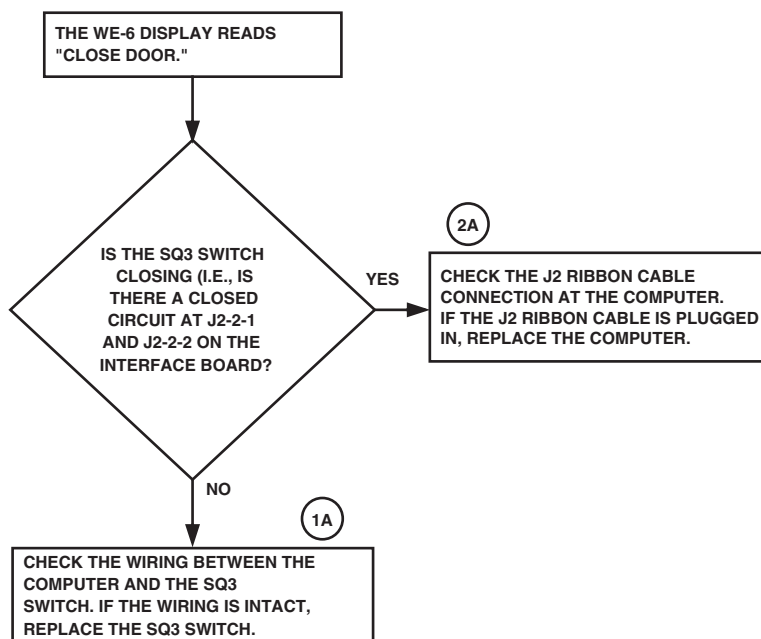
TO ACTIVATE
FACT ARRANGEMENT.

SPECIALLY ORDERED.

PHM2063S
604842M

8. Door Lock Switch Analysis (220 Volt Control)

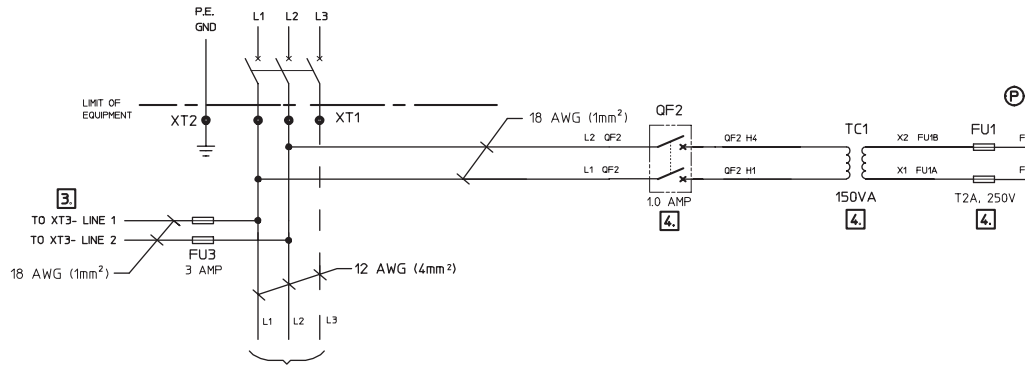
Symptom: The WE-6 Display Reads "Close Door"



PHM1956S

Please refer to the following 2 pages for wiring diagram information.

Door Lock Switch Analysis (220 Volt Control) The WE-6 Display Reads "Close Door" (Sheet 1 of 2)

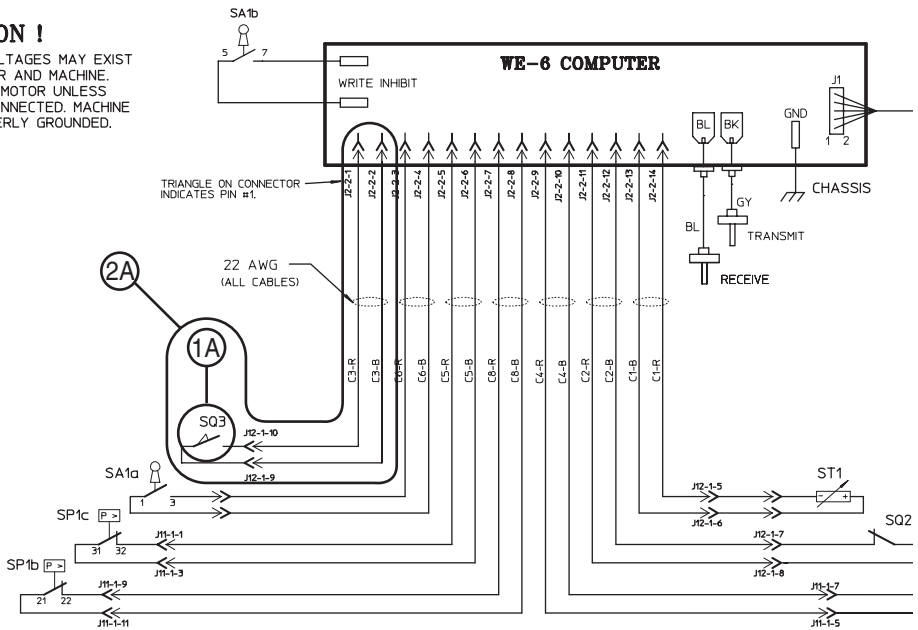


SCHEMATIC !
CONTROL TX (635635)
REFER TO APPROPRIATE CONTACTOR SCHEMATIC

CAUTION !
DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

LEGEND

- OPTIONAL CONNECTIONS
- CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACCOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- OF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- SO1 - SWITCH, MAGNETIC DOOR CLOSED
- SO2 - SWITCH, OUT-OF-BALANCE
- SO3 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT

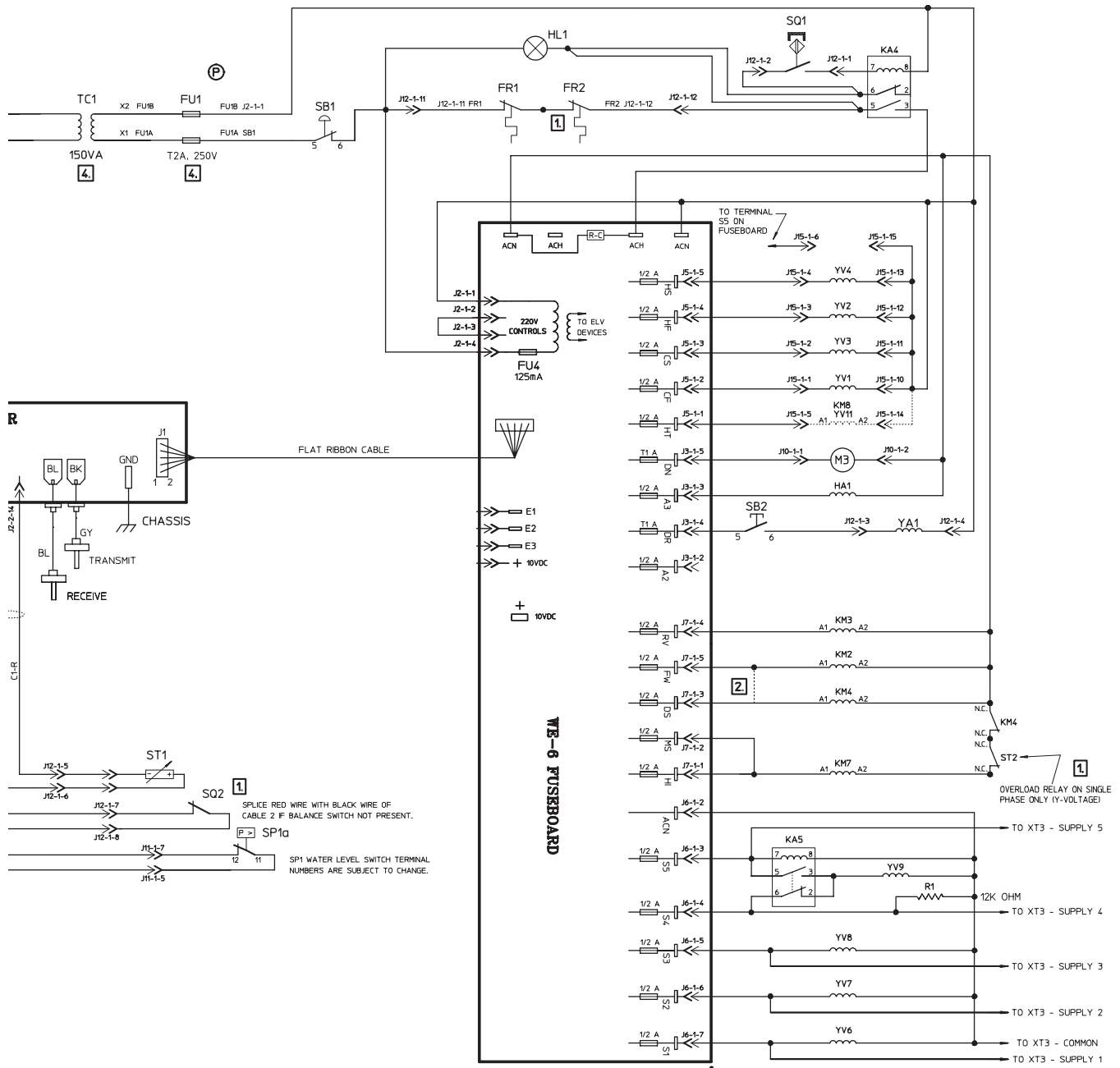


NOTES:

1. SO2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS.
FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
2. CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH THE ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WHEN I
3. OMIT WIRES TO "XT3-LINE1", "XT3-LINE2" & FUSEHOLDER FU3 ON MACHINES WITH
4. CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (OF2) ARE NOT PRESENT ON O- & THE TWO FU1 FUSES, CONNECT DIRECTLY TO L1 & L2 ON O- & Y-VOLTAGE MACH. REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANSFORMER

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

Door Lock Switch Analysis (220 Volt Control) The WE-6 Display Reads "Close Door" (Sheet 2 of 2)



SPEEDS.
EDS.
IE ONLY.

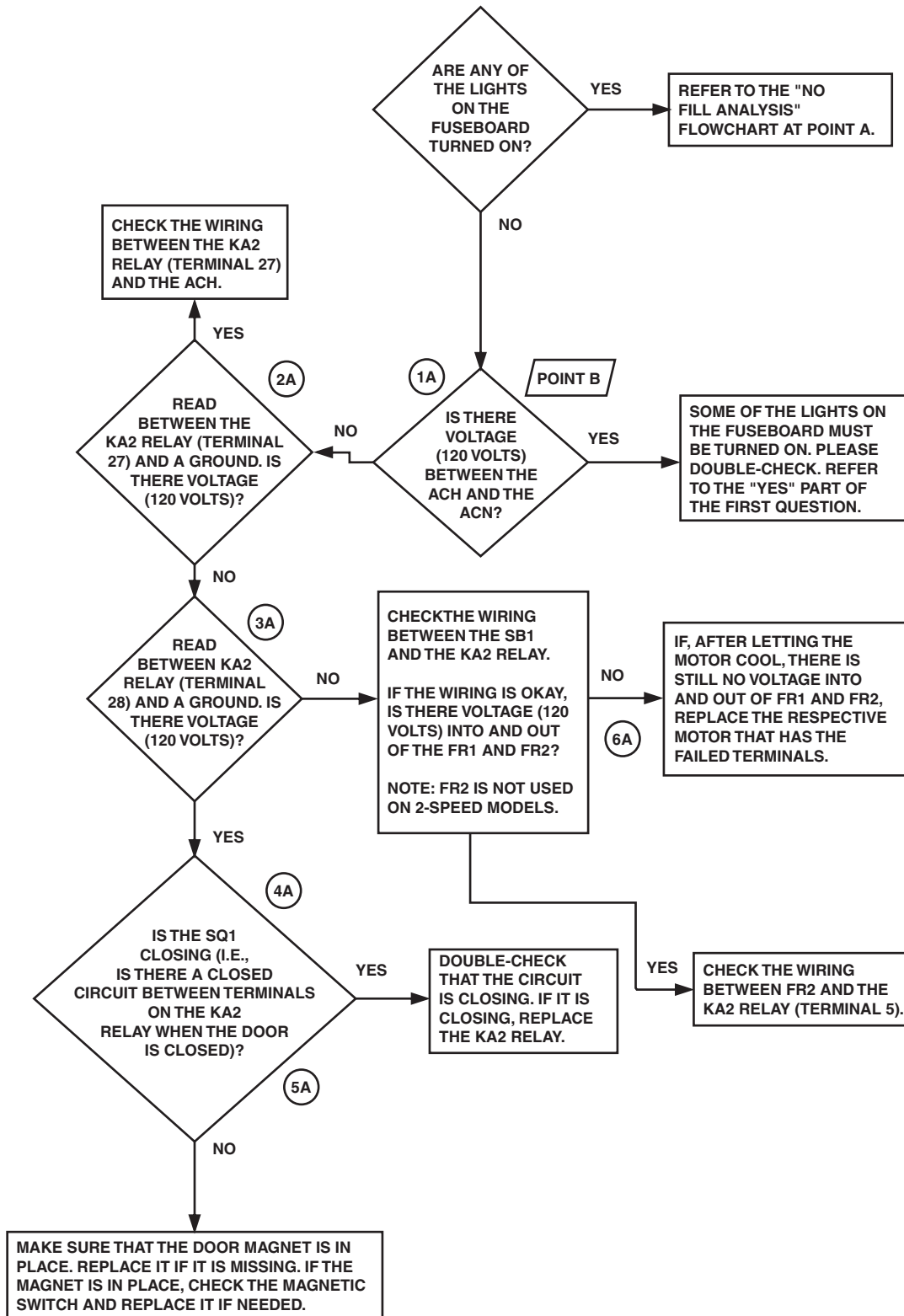
1. A1 OF KM2 (FWD), ALONG WITH THE WIRE FROM "FW".
2. KM4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

USE HOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

3. (QF2) ARE NOT PRESENT ON 0- & Y-VOLTAGE MACHINES.
1. L1 & L2 ON 0- & Y-VOLTAGE MACHINES.
10. ON DETAILS OF CONTROL TRANSFORMER.

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0604842 (P)

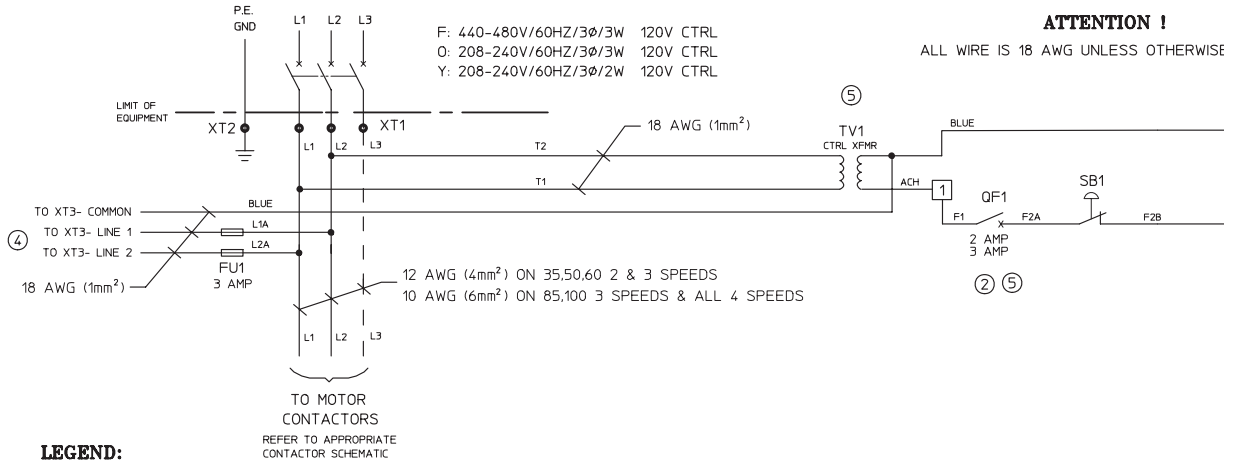
9. No Fuseboard Functions (120 Volt Control)



PHM2064S

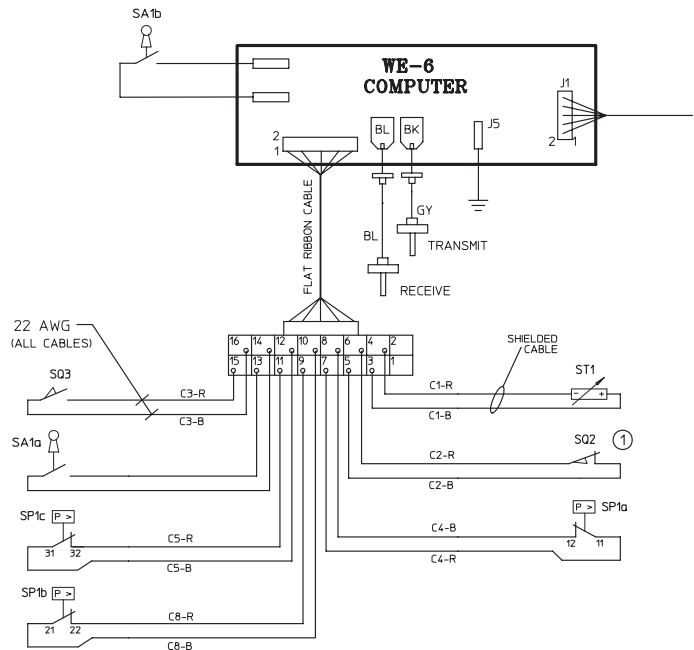
Please refer to the following 2 pages for wiring diagram information.

No Fuseboard Functions (120 Volt Control) (Sheet 1 of 2)



LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- SQ1 = SWITCH MAGNETIC DOOR CLOSED
- SQ2 = SWITCH OUT-OF-BALANCE DETECTION
- SQ3 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN



NOTES:

- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAILS. USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (REFER
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED.

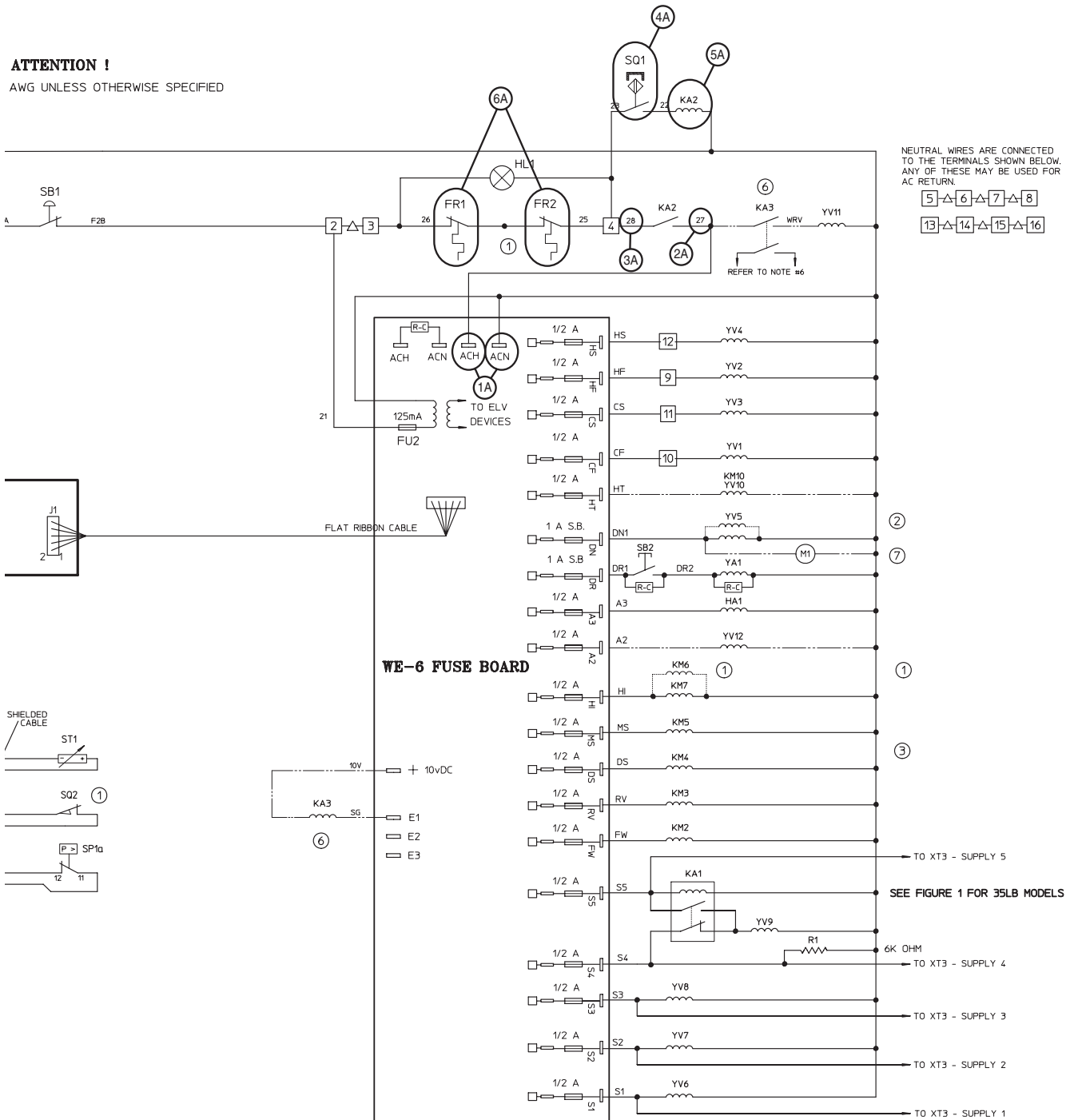
664842.e | P | 1 | 1 | drawings - ARCHIVED. Plotted by 'shannon' on 25-Nov-2002 10:25:52

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

No Fuseboard Functions (120 Volt Control) (Sheet 2 of 2)

ATTENTION !

AWG UNLESS OTHERWISE SPECIFIED



NEUTRAL WIRES ARE CONNECTED TO THE TERMINALS SHOWN BELOW. ANY OF THESE MAY BE USED FOR AC RETURN.

5-8
13-16

WE-6 FUSE BOARD

FIGURE 1

TED DRAINS.
D DRAINS.

IARD.

IAN 240V.

#601896 FOR DETAILS.
3 AMP BREAKER (REFER TO NOTE 2).

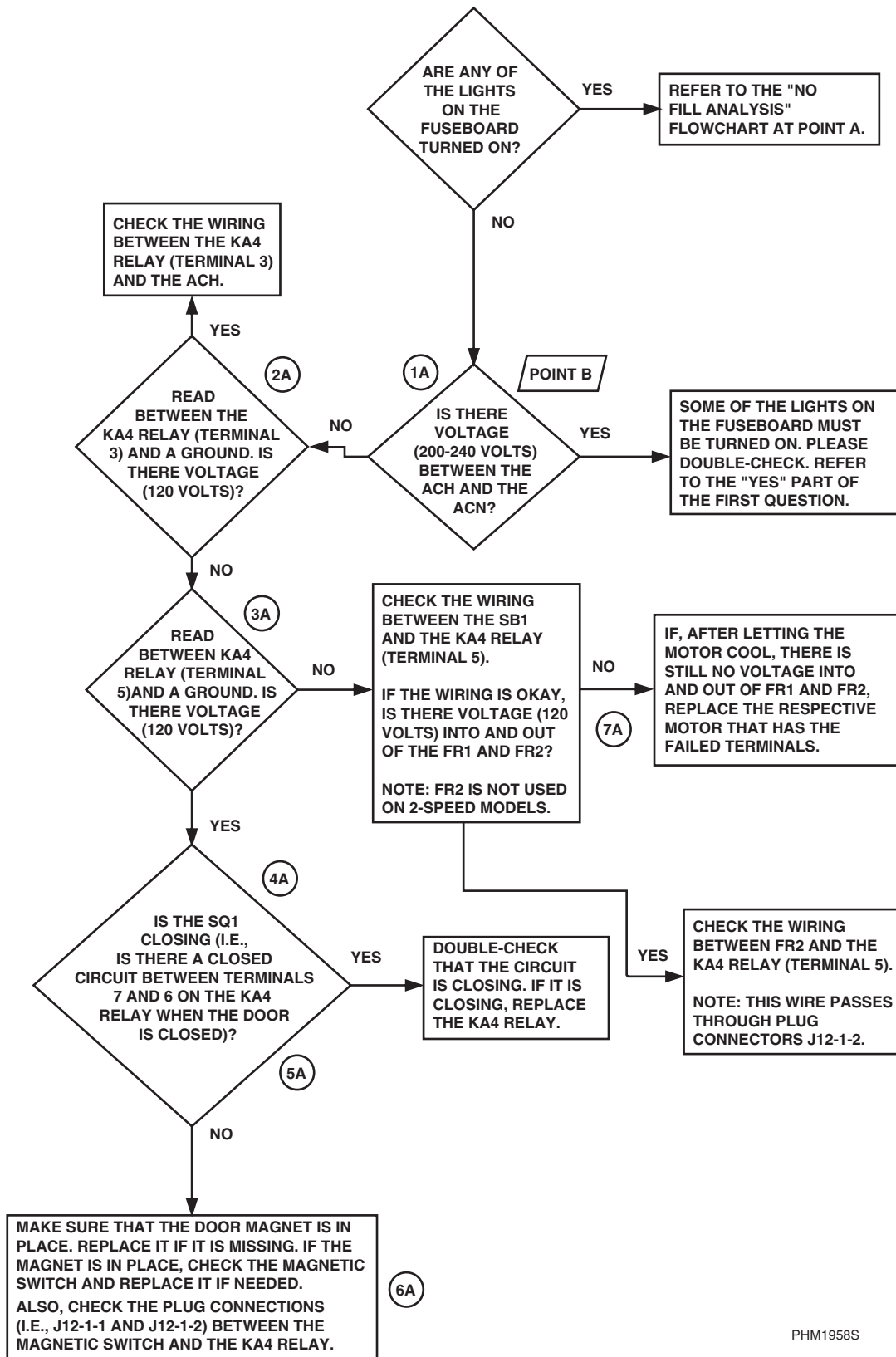
↑ TO ACTIVATE FACT ARRANGEMENT.

↓ SPECIALLY ORDERED.

SEE FIGURE 1 FOR 35LB MODELS

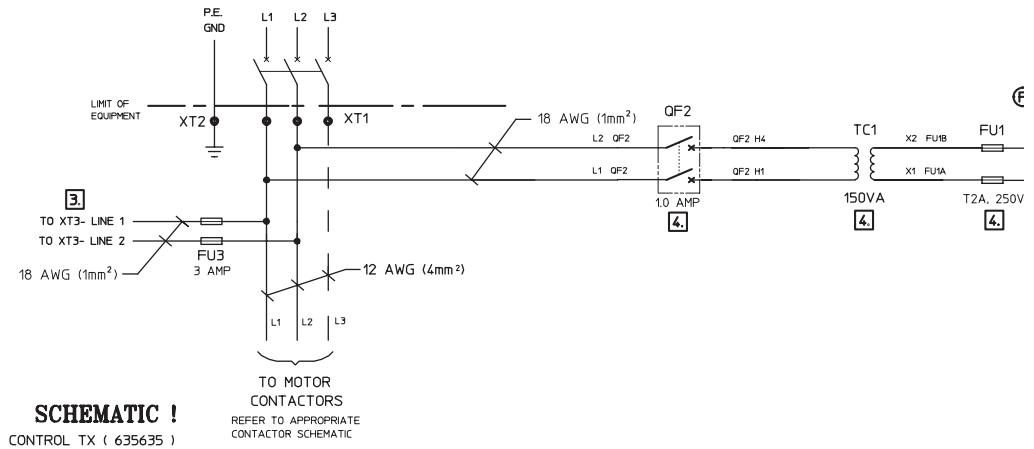
PHM2065S
604842M

10. No Fuseboard Functions (220 Volt Control)



Please refer to the following 2 pages for wiring diagram information.

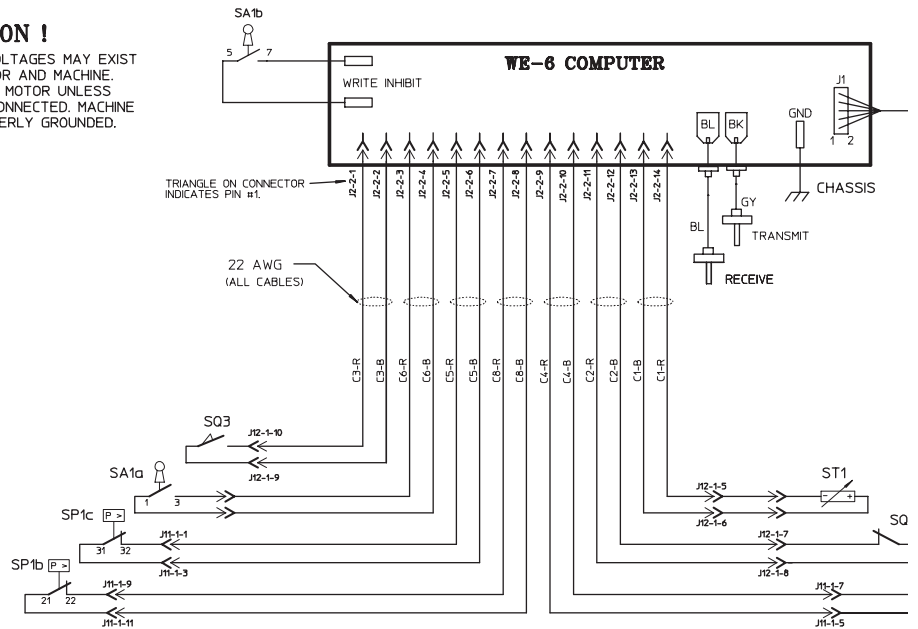
No Fuseboard Functions (220 Volt Control) (Sheet 1 of 2)



CAUTION !
DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

LEGEND

- - - - - OPTIONAL CONNECTIONS
- CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- QF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- SQ1 - SWITCH, MAGNETIC DOOR CLOSED
- SQ2 - SWITCH, OUT-OF-BALANCE
- SQ3 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT

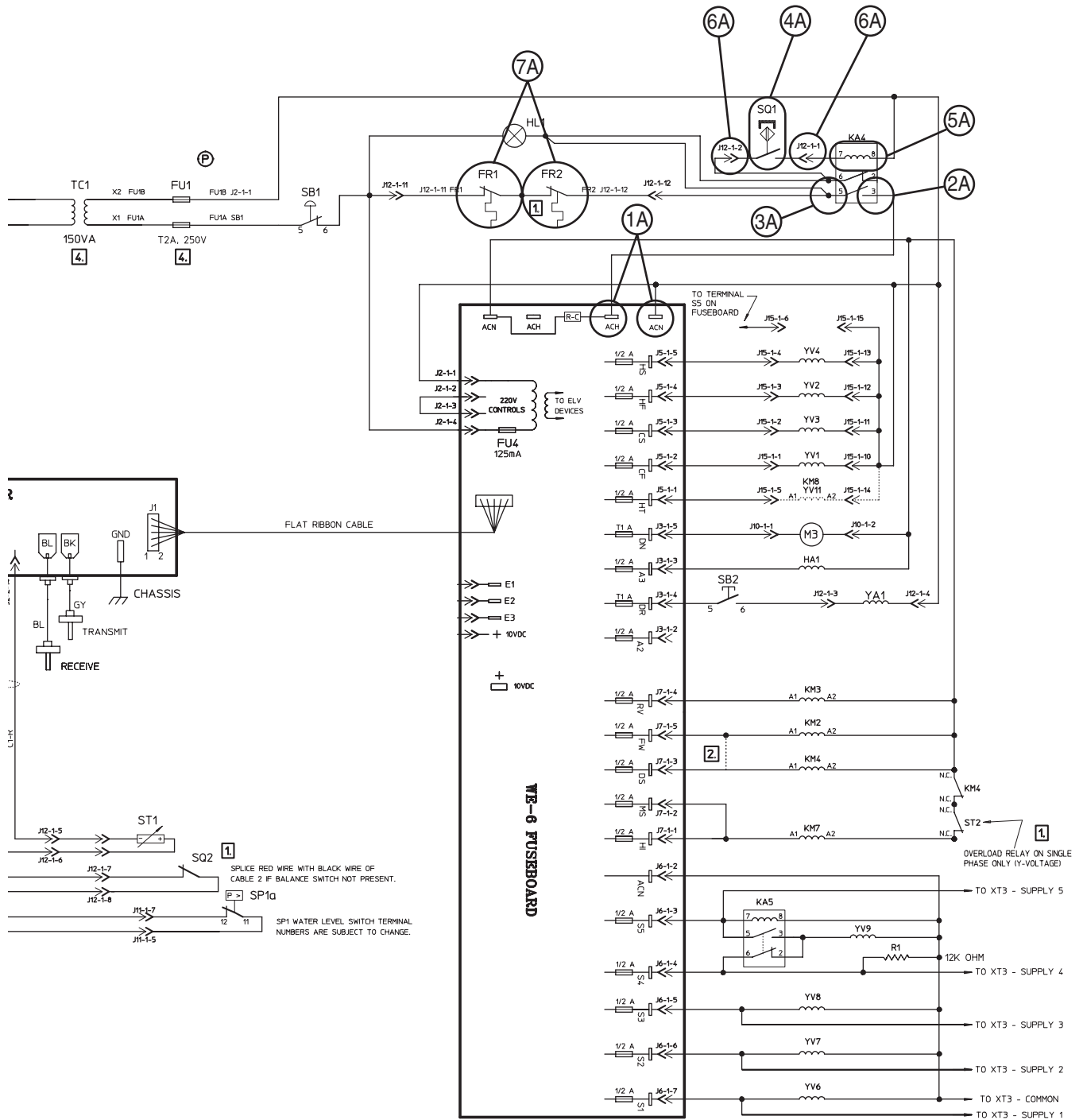


NOTES:

1. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS.
FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
2. CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH TH1 ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WHEN
3. OMIT WIRES TO 'XT3-LINE1', 'XT3-LINE2' & FUSEHOLDER FU3 ON MACHINES WITH
4. CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (QF2) ARE NOT PRESENT ON 0-. THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON 0- & Y-VOLTAGE MAC REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANSF

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

No Fuseboard Functions (220 Volt Control) (Sheet 2 of 2)



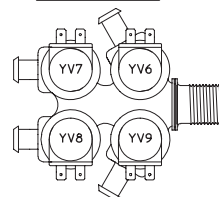
SPEEDS.
EDS.
E ONLY.

A1 OF KM2 (FWD), ALONG WITH THE WIRE FROM 'FW',
KM4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

JSEHOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

L1 & L2 ON O- & Y-VOLTAGE MACHINES.
ON DETAILS OF CONTROL TRANSFORMER.

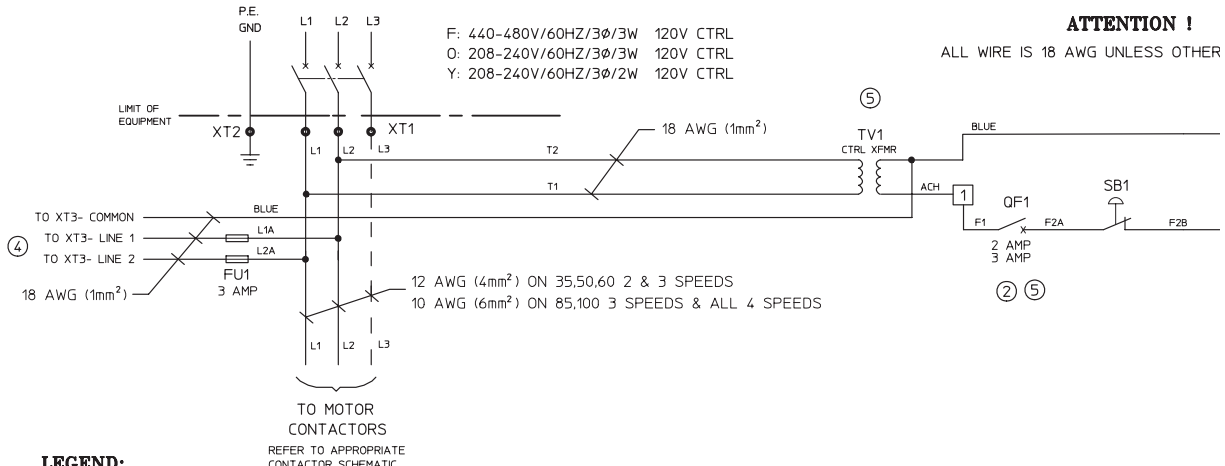
4-WAY ELBI VALVE



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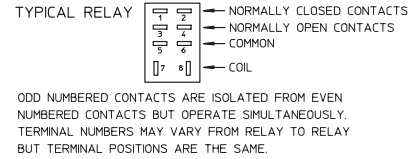
Please refer to the following 2 pages for wiring diagram information.

No Motor Operation (120 Volt Control) (Sheet 1 of 2)

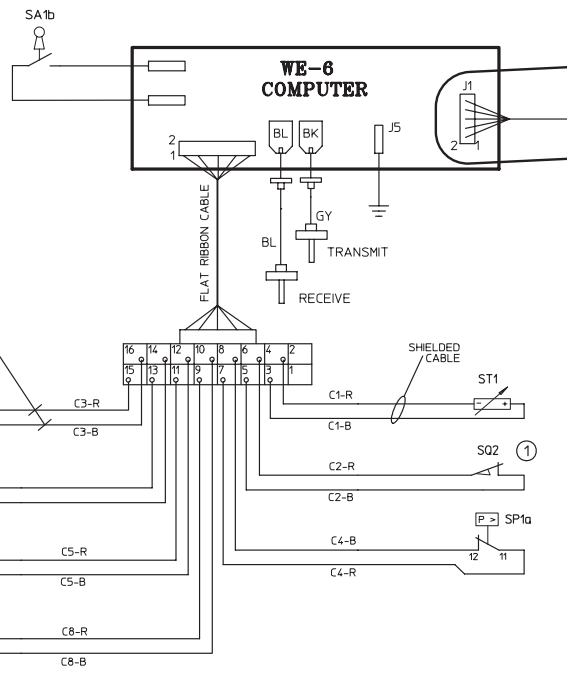


ATTENTION !
ALL WIRE IS 18 AWG UNLESS OTHER

- LEGEND:**
- △- = TERMINAL STRIP JUMPER (TERMINAL STRIP JUMPERS MAY BE USED IN VARIOUS PLACES NOT SHOWN ON SCHEMATIC)
 - [2] = TERMINAL STRIP, TERMINAL #2
 - [R-C] = RESISTOR CAPACITOR FILTER NETWORK
 - C4-B = CABLE #4, BLACK WIRE



- LEGEND OF COMPONENTS**
- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
 - FU2 = FUSE 125mA SLO-BLO 5X20mm
 - FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
 - FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
 - HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
 - HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
 - KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
 - KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
 - KA3 = RELAY WATER REUSE FILL VALVE
 - KM2 = CONTACTOR FORWARD ROTATION
 - KM3 = CONTACTOR REVERSE ROTATION
 - KM4 = CONTACTOR DISTRIBUTION SPEED
 - KM5 = CONTACTOR MEDIUM SPEED
 - KM6 = CONTACTOR MEDIUM WINDING SHORTING
 - KM7 = CONTACTOR HIGH SPEED
 - KM10 = CONTACTOR ELECT HEAT
 - M1 = MOTOR COOLING FAN
 - QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
 - R1 = RESISTOR 6K OHM SUPPLY RELAY
 - R-C = RESISTOR-CAPACITOR NETWORK
 - SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
 - SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
 - SB1 = SWITCH EMERGENCY STOP
 - SB2 = SWITCH DOOR UNLOCK
 - SP1a = SWITCH WATER PRESSURE LOW LEVEL
 - SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
 - SP1c = SWITCH WATER PRESSURE HIGH LEVEL
 - SQ1 = SWITCH MAGNETIC DOOR CLOSED
 - SQ2 = SWITCH OUT-OF-BALANCE DETECTION
 - SQ3 = SWITCH DOOR LOCKED DETECTION
 - ST1 = SENSOR WATER TEMPERATURE
 - TV1 = CONTROL TRANSFORMER 150VA & 250VA
 - XT1 = TERMINAL INPUT POWER DISTRIBUTION
 - XT2 = TERMINAL PROTECTIVE EARTH GROUND
 - XT3 = TERMINAL EXTERNAL SUPPLY
 - YA1 = SOLENOID DOOR UNLOCK
 - YV1 = VALVE COLD FILL
 - YV2 = VALVE HOT FILL
 - YV3 = VALVE COLD SPRAY
 - YV4 = VALVE HOT SPRAY
 - YV5 = VALVE SEWER DRAIN
 - YV6 = VALVE SUPPLY 1 FLUSH
 - YV7 = VALVE SUPPLY 2 FLUSH
 - YV8 = VALVE SUPPLY 3 FLUSH
 - YV9 = VALVE SUPPLY 4 FLUSH
 - YV10 = VALVE STEAM HEAT
 - YV11 = VALVE WATER REUSE FILL
 - YV12 = VALVE WATER REUSE DRAIN



- NOTES:**
- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
 - ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
 - ③ JUMPER "DS" TO "FW" & "MS" TO "HI" ON UW35-60 2 SPEEDS. JUMPER "MS" TO "HI" ON UW35-60 3 SPEEDS. JUMPER "DS" TO "FW" ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
 - ④ OMIT "L1A" AND "L2A" ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
 - ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAIL USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (RE
 - ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
 - ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED

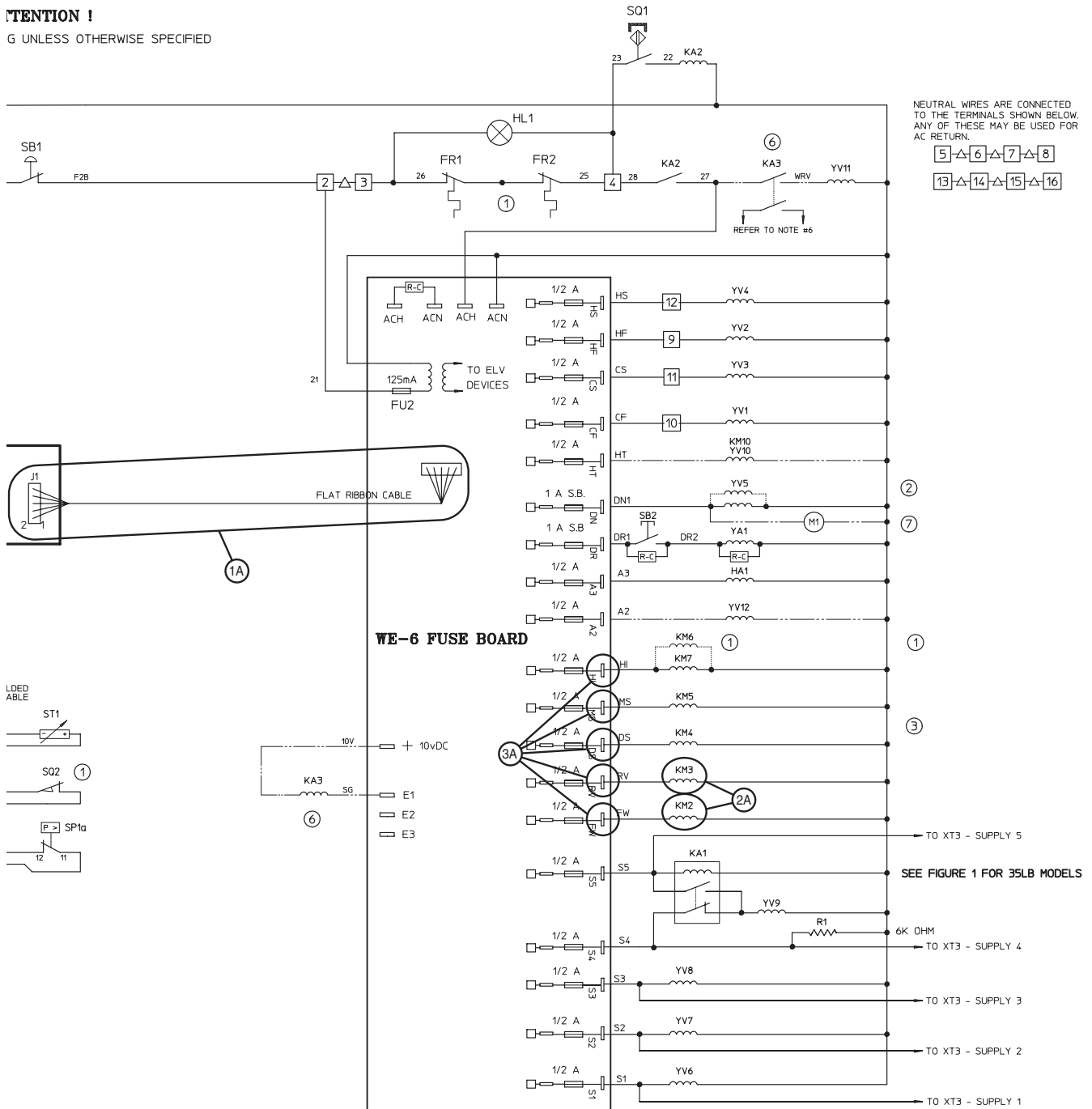
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NOTE: Refer to the wiring diagram supplied with your machine.

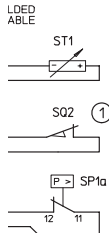
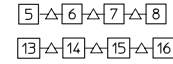
No Motor Operation (120 Volt Control) (Sheet 2 of 2)

ATTENTION !

ALL WIRING IS TO BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) UNLESS OTHERWISE SPECIFIED



NEUTRAL WIRES ARE CONNECTED TO THE TERMINALS SHOWN BELOW. ANY OF THESE MAY BE USED FOR AC RETURN.



- 1) DRAINS RAINS.
- 2).
- 240V.
- 01896 FOR DETAILS. MFP BREAKER (REFER TO NOTE 2).
- 3) ACTIVATE T ARRANGEMENT.
- 4) SPECIALLY ORDERED.

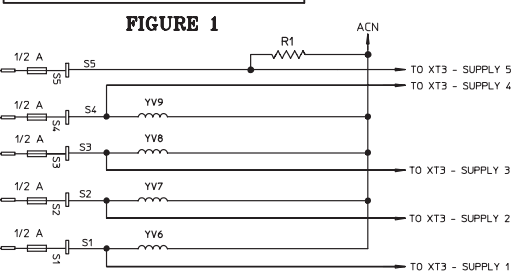
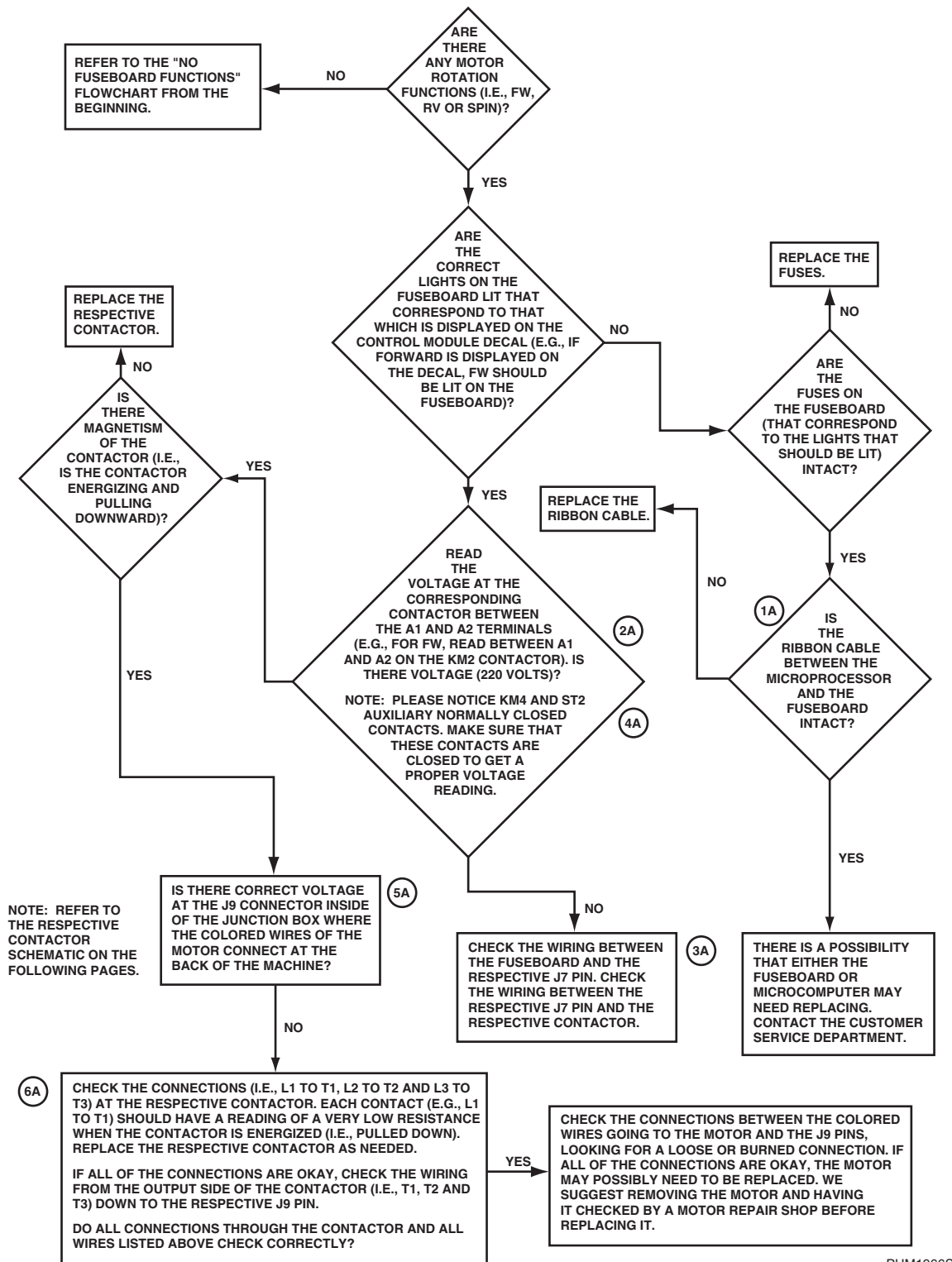


FIGURE 1

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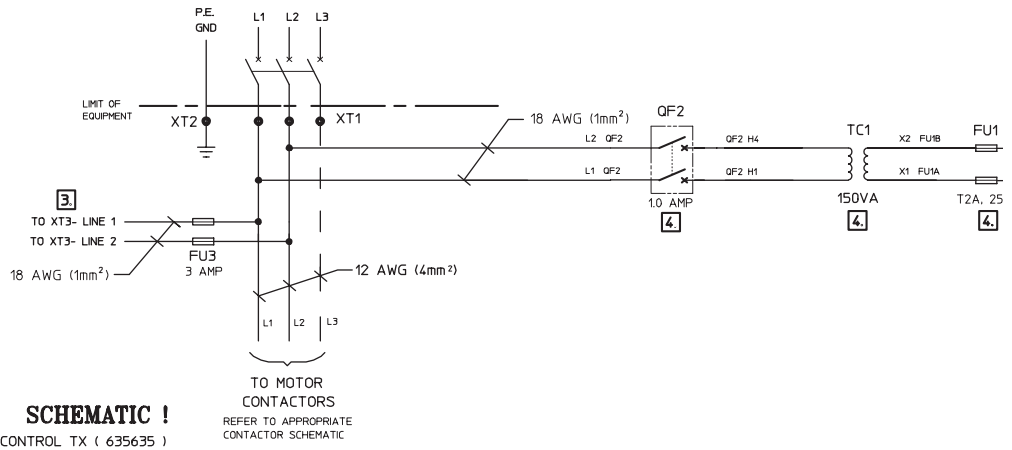
12. No Motor Operation (220 Volt Control)



PHM1966S

Please refer to the following 2 pages for wiring diagram information.

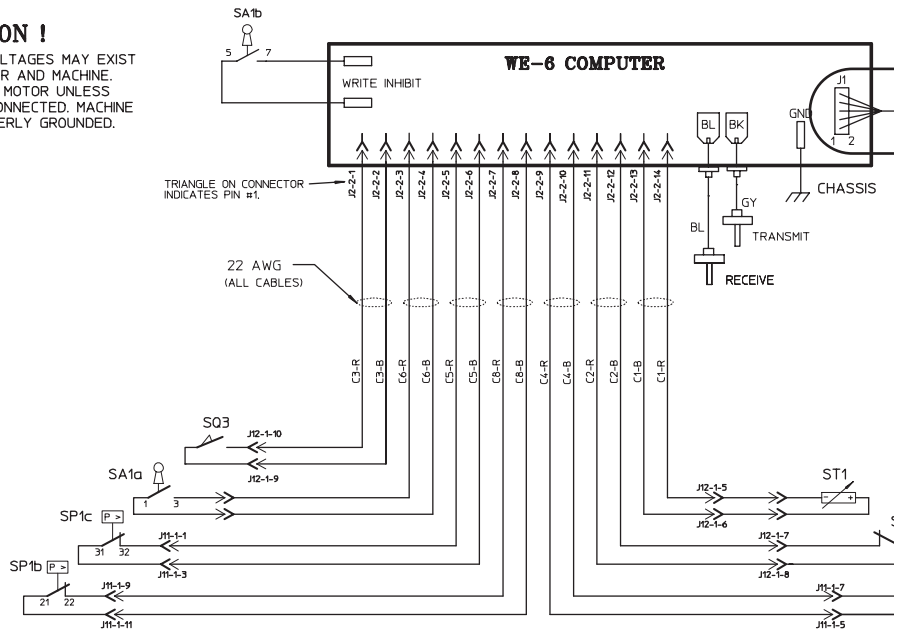
No Motor Operation (220 Volt Control) (Sheet 1 of 2)



CAUTION !
DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDING.

LEGEND

- - - - - OPTIONAL CONNECTIONS
- CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- QF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- S01 - SWITCH, MAGNETIC DOOR CLOSED
- S02 - SWITCH, OUT-OF-BALANCE
- S03 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT

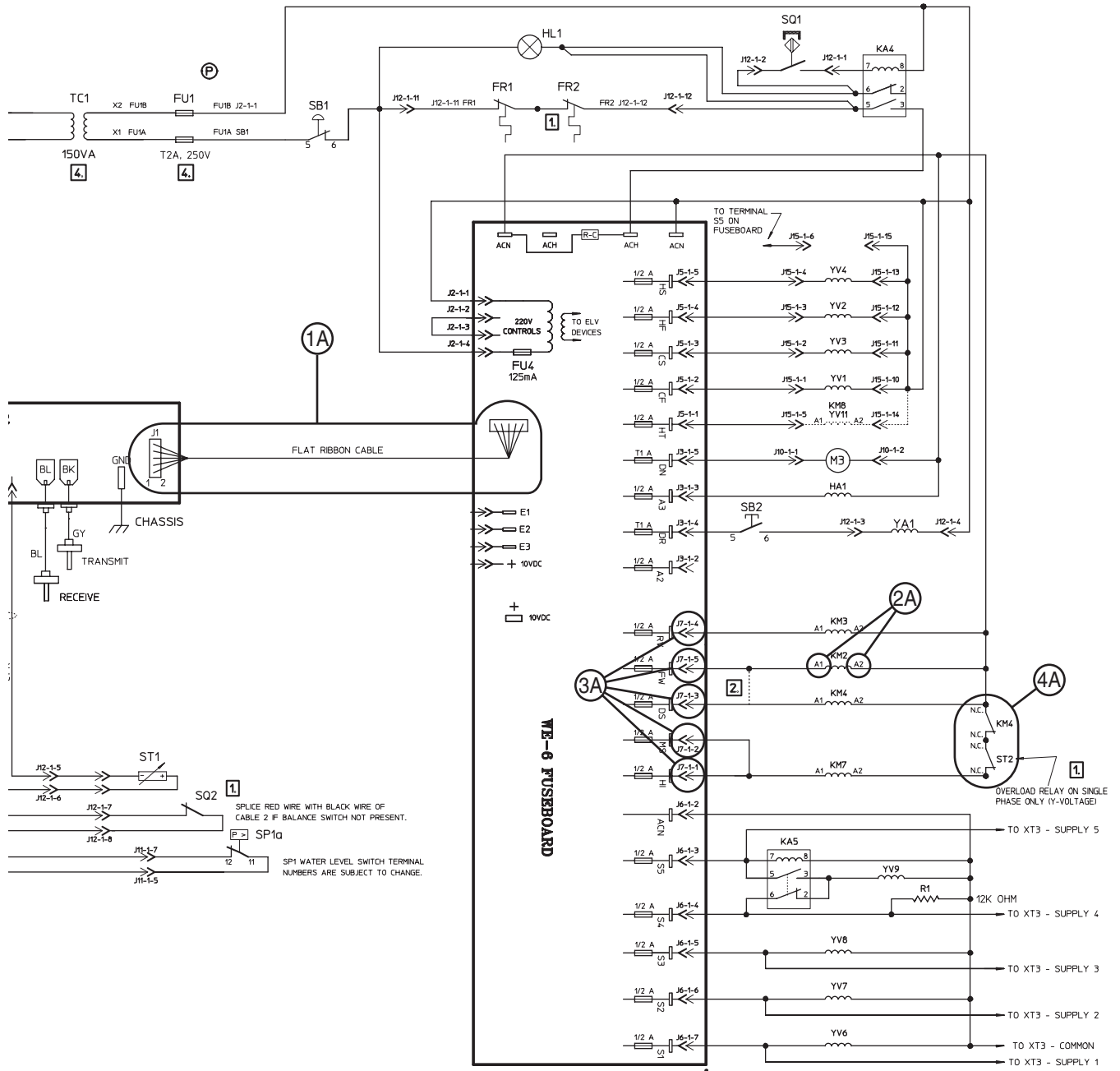


NOTES:

1. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS. ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
2. CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH 1 ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WH
3. OMIT WIRES TO *XT3-LINE1*, *XT3-LINE2* & FUSEHOLDER FU3 ON MACHINES W1
4. CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (QF2) ARE NOT PRESENT ON 0. THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON 0- & Y-VOLTAGE M. REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANS

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

No Motor Operation (220 Volt Control) (Sheet 2 of 2)



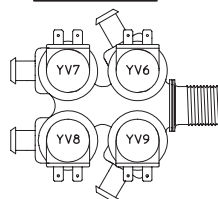
SPEEDS.
DS.
: ONLY.

A1 OF KM2 (FWD), ALONG WITH THE WIRE FROM 'FW',
KM4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

SEHOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

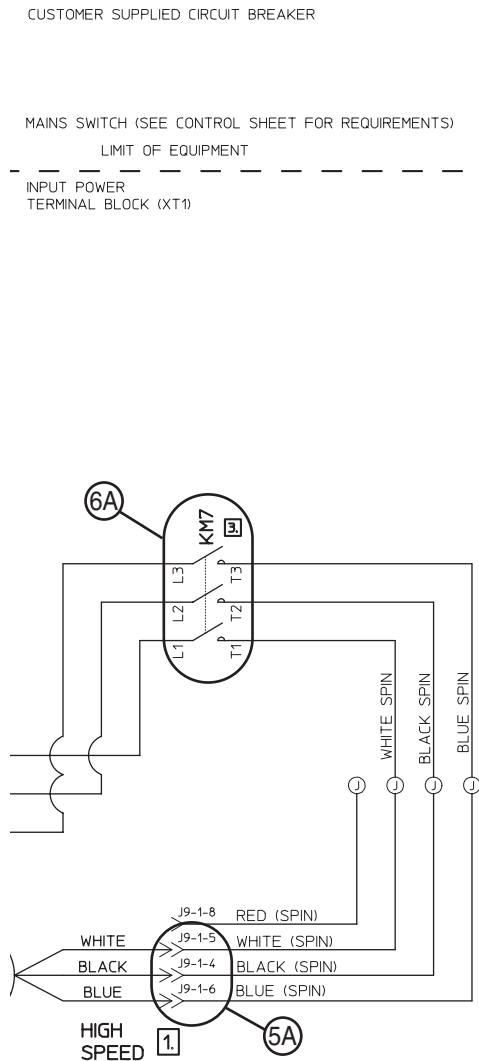
(QF2) ARE NOT PRESENT ON 0- & Y-VOLTAGE MACHINES.
L1 & L2 ON 0- & Y-VOLTAGE MACHINES.
3N DETAILS OF CONTROL TRANSFORMER.

4-WAY ELBI VALVE



PHM1967S
0604842 (P)

Contactor Schematic For 2-Speed Models (Sheet 2 of 2)



NOTES:

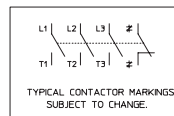
- 1 IF MOTOR ROTATION IS INCORRECT, REVERSE THE WIRES LABELED "BLUE" AND "BLACK" AT THE ASSOCIATED CONTACTOR. "J9-1" MOTOR CONNECTOR (HARNESS #141899) MAY NOT BE PRESENT ON SOME MACHINES.
- 2 REFER TO MACHINE ELECTRICAL SCHEMATIC FOR PROPER CONNECTION OF MOTOR THERMAL OVERLOAD SWITCH LEADS, CONTACTOR COIL AND AUXILIARY NORMALLY CLOSED POSITIONS.
- 3 CONTACTORS ARE ORIENTED IN THE SCHEMATIC AS THEY PHYSICALLY APPEAR, WHEN VIEWED FROM FRONT OF MACHINE.
- 4 SUPPLY WIRES ARE 12AWG SO THE "PV" & "P2/3" MODELS CAN USE THE SAME WIRES. THIS CIRCUIT ONLY REQUIRES 14AWG.

LEGEND:

- KM2 = CONTACTOR, FORWARD ROTATION
- KM3 = CONTACTOR, REVERSE ROTATION
- KM4 = CONTACTOR, DISTRIBUTION SPEED
- KM5 = CONTACTOR, MEDIUM SPEED
- KM6 = CONTACTOR, MEDIUM WINDING SHORTING
- KM7 = CONTACTOR, HIGH SPEED
- M1 = MOTOR, WASH/DISTRIBUTION
- M2 = MOTOR, EXTRACT
- ST2 = RELAY, OVERLOAD
- XT1 = TERMINAL BLOCK, INPUT POWER

- 10 = TERMINAL STRIP
- RC = RESISTOR/CAPACITOR NETWORK
- △ = TERMINAL STRIP JUMPER
- ▽ = CONTACTOR MECHANICAL INTERLOCK
- = OPTIONAL CONNECTIONS
- Ⓝ = MOTOR LEAD JUNCTION BOX ON BACK OF FRAME

CONTACTOR DETAIL

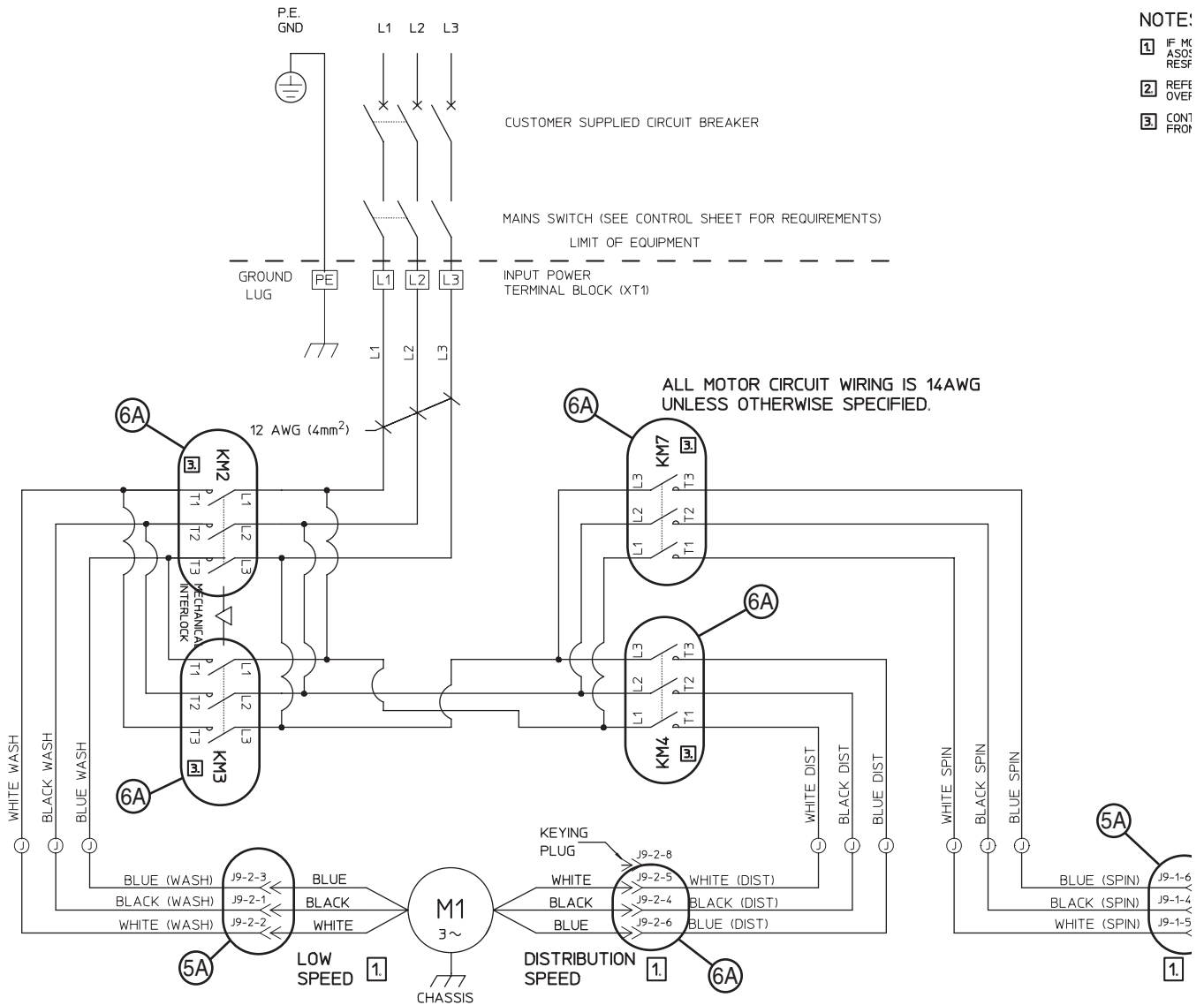


J9-1 MOTOR CONNECTOR



PHM1968S
0604375 (H)

Contactor Schematic For 3-Speed Models (Sheet 1 of 2)



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

Contactor Schematic For 3-Speed Models (Sheet 2 of 2)

NOTES:

1. IF MOTOR ROTATION IS INCORRECT, REVERSE THE WIRES LABELED 'BLUE' AND 'BLACK' AT THE ASSOCIATED CONTACTOR. 'J9-1' AND 'J9-2' MOTOR CONNECTORS (HARNESSES #141899 & #141900, RESPECTIVELY) MAY NOT BE PRESENT ON SOME MACHINES.
2. REFER TO MACHINE ELECTRICAL SCHEMATIC FOR PROPER CONNECTION OF MOTOR THERMAL OVERLOAD SWITCH LEADS, CONTACTOR COIL AND AUXILIARY NORMALLY CLOSED POSITIONS.
3. CONTACTORS ARE ORIENTED IN THE SCHEMATIC AS THEY PHYSICALLY APPEAR, WHEN VIEWED FROM FRONT OF MACHINE.

STOMER SUPPLIED CIRCUIT BREAKER

NS SWITCH (SEE CONTROL SHEET FOR REQUIREMENTS)

LIMIT OF EQUIPMENT

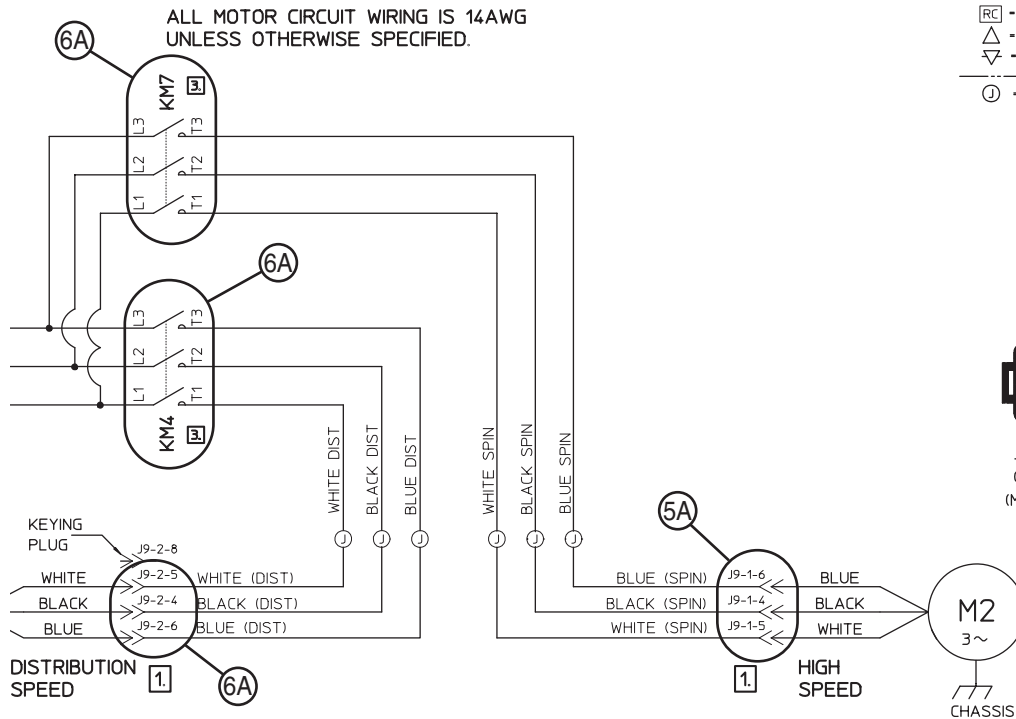
UT POWER
RMINAL BLOCK (XT1)

LEGEND:

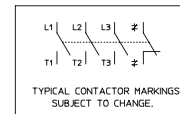
- KM2 = CONTACTOR, FORWARD ROTATION
- KM3 = CONTACTOR, REVERSE ROTATION
- KM4 = CONTACTOR, DISTRIBUTION SPEED
- KM5 = CONTACTOR, MEDIUM SPEED
- KM6 = CONTACTOR, MEDIUM WINDING SHORTING
- KM7 = CONTACTOR, HIGH SPEED
- M1 = MOTOR, WASH/DISTRIBUTION
- M2 = MOTOR, EXTRACT
- ST2 = RELAY, OVERLOAD
- XT1 = TERMINAL BLOCK, INPUT POWER

- [10] = TERMINAL STRIP
- [RC] = RESISTOR/CAPACITOR NETWORK
- △ = TERMINAL STRIP JUMPER
- ▽ = CONTACTOR MECHANICAL INTERLOCK
- = OPTIONAL CONNECTIONS
- (J) = MOTOR LEAD JUNCTION BOX ON BACK OF FRAME

ALL MOTOR CIRCUIT WIRING IS 14AWG UNLESS OTHERWISE SPECIFIED.



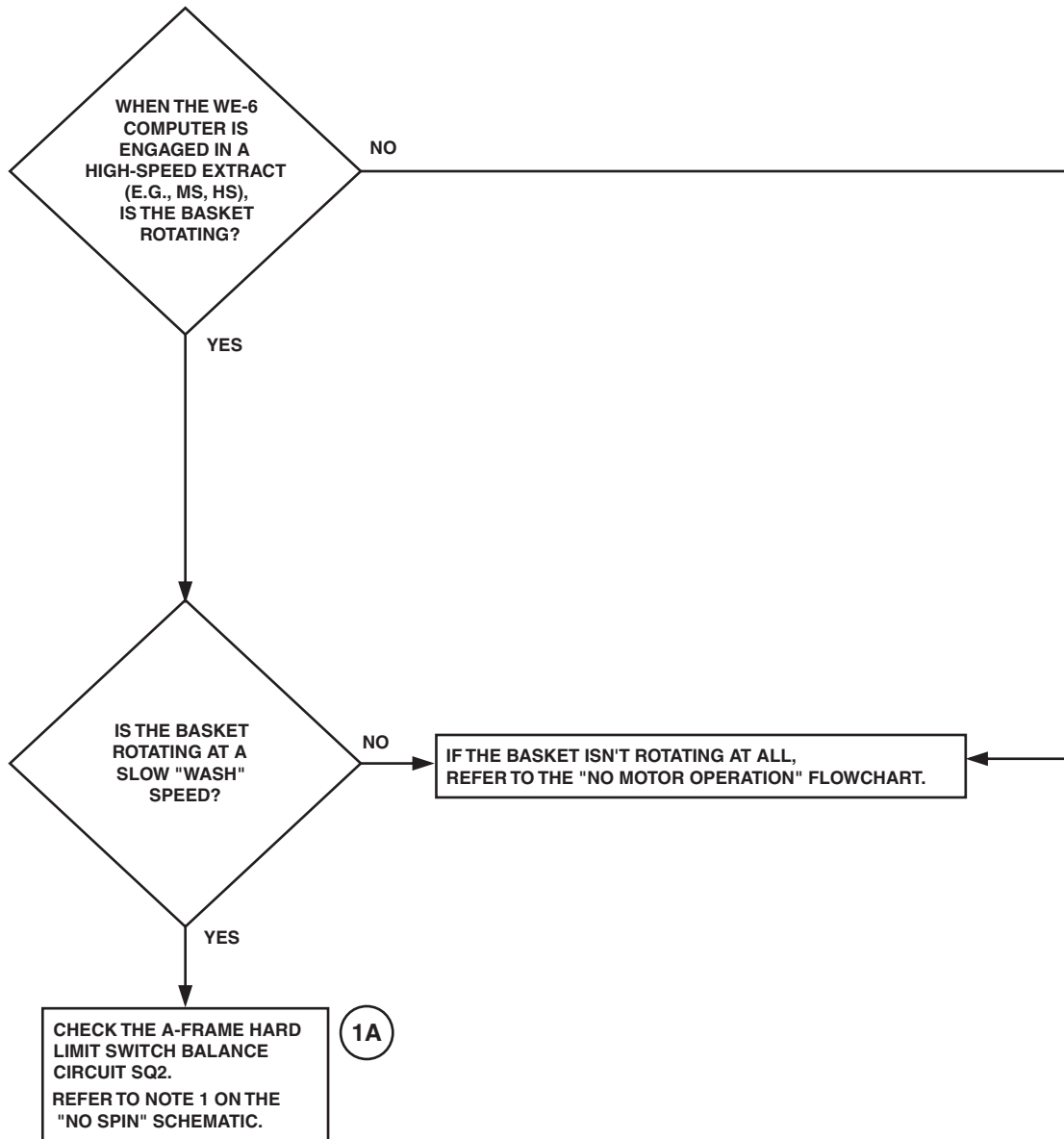
CONTACTOR DETAIL



PHM1969S
0606812 (J)

13. No Spin (120 Volt Control)

NOTE: WHILE PERFORMING THIS CHECK, MAKE SURE THAT THE WASHER-EXTRACTOR IS RUNNING WITH A NORMAL-SIZE LOAD.

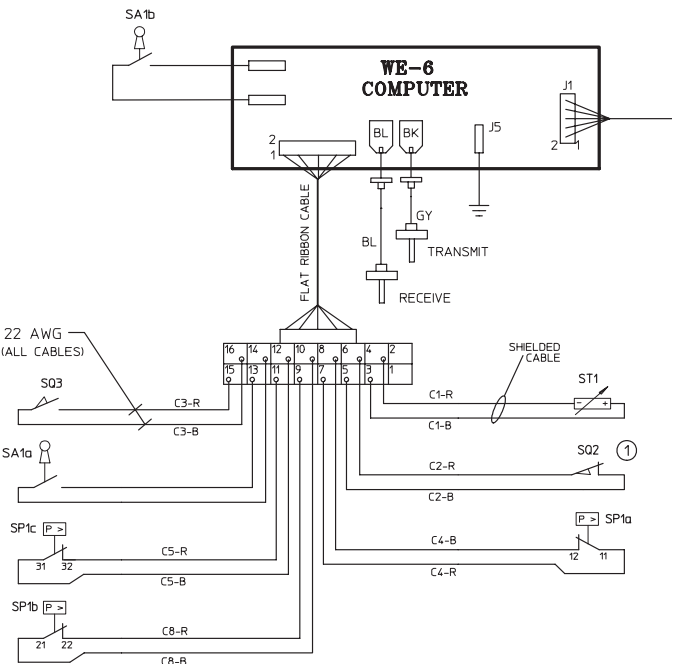
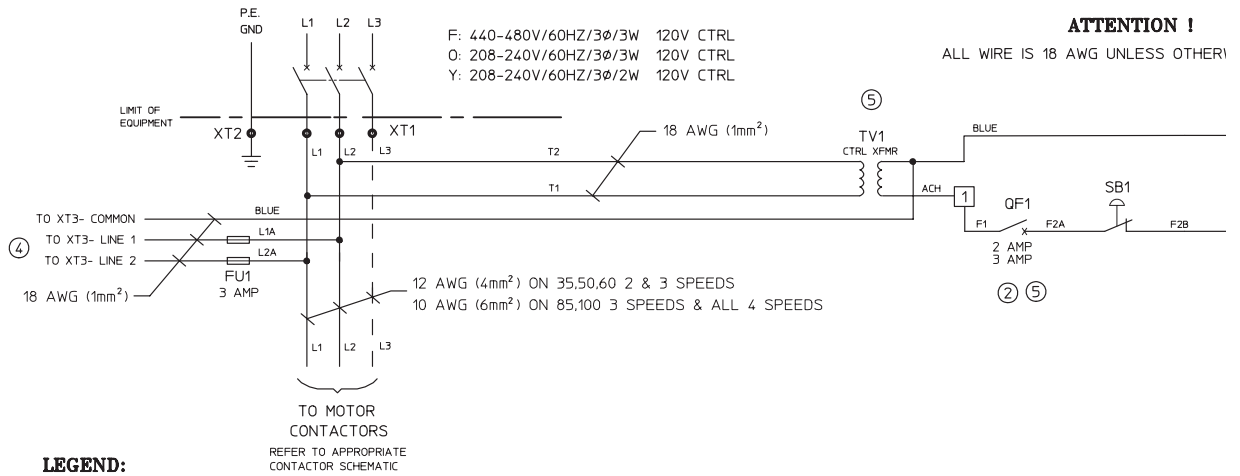


PHM2068S

Please refer to the following 2 pages for wiring diagram information.

Troubleshooting

No Spin (120 Volt Control) (Sheet 1 of 2)



NOTES:

- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER "DS" TO "FW" & "MS" TO "HI" ON UW35-60 2 SPEEDS. JUMPER "MS" TO "HI" ON UW35-60 3 SPEEDS. JUMPER "DS" TO "FW" ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT "L1A" AND "L2A" ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAIL USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (REF
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED

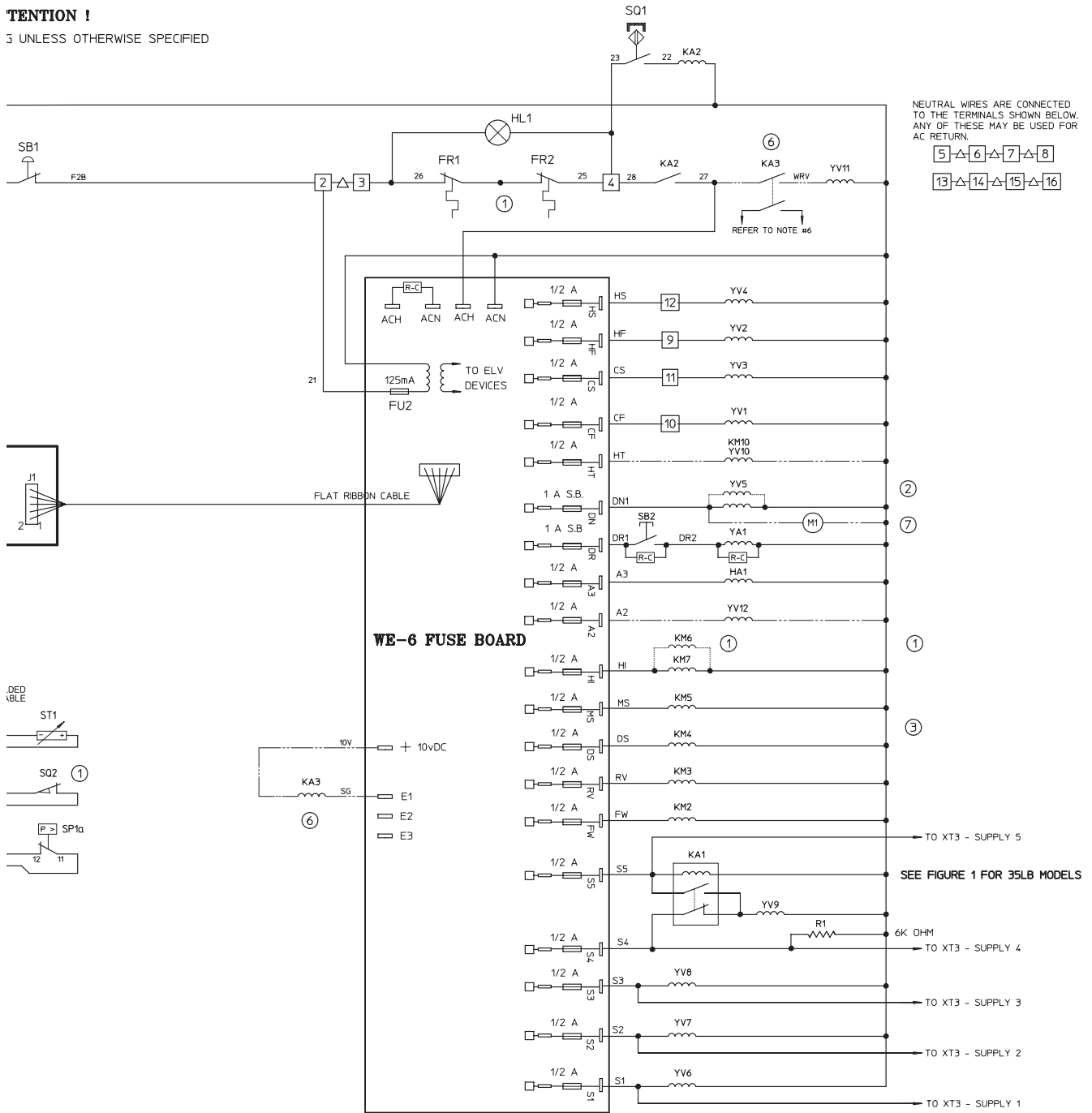
604842_e | 1 | 1 | drawings - ARCHIVED. Plotted by 'shannon' on 25-Nov-2002 10:25:52

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

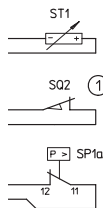
No Spin (120 Volt Control) (Sheet 2 of 2)

ATTENTION !

5 UNLESS OTHERWISE SPECIFIED



DED
BLE



DRAINS.
RAINS.

1.

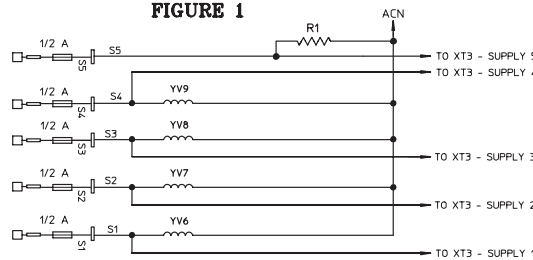
240V.

1896 FOR DETAILS.
MP BREAKER (REFER TO NOTE 2).

ACTIVATE
ARRANGEMENT.

ESPECIALLY ORDERED.

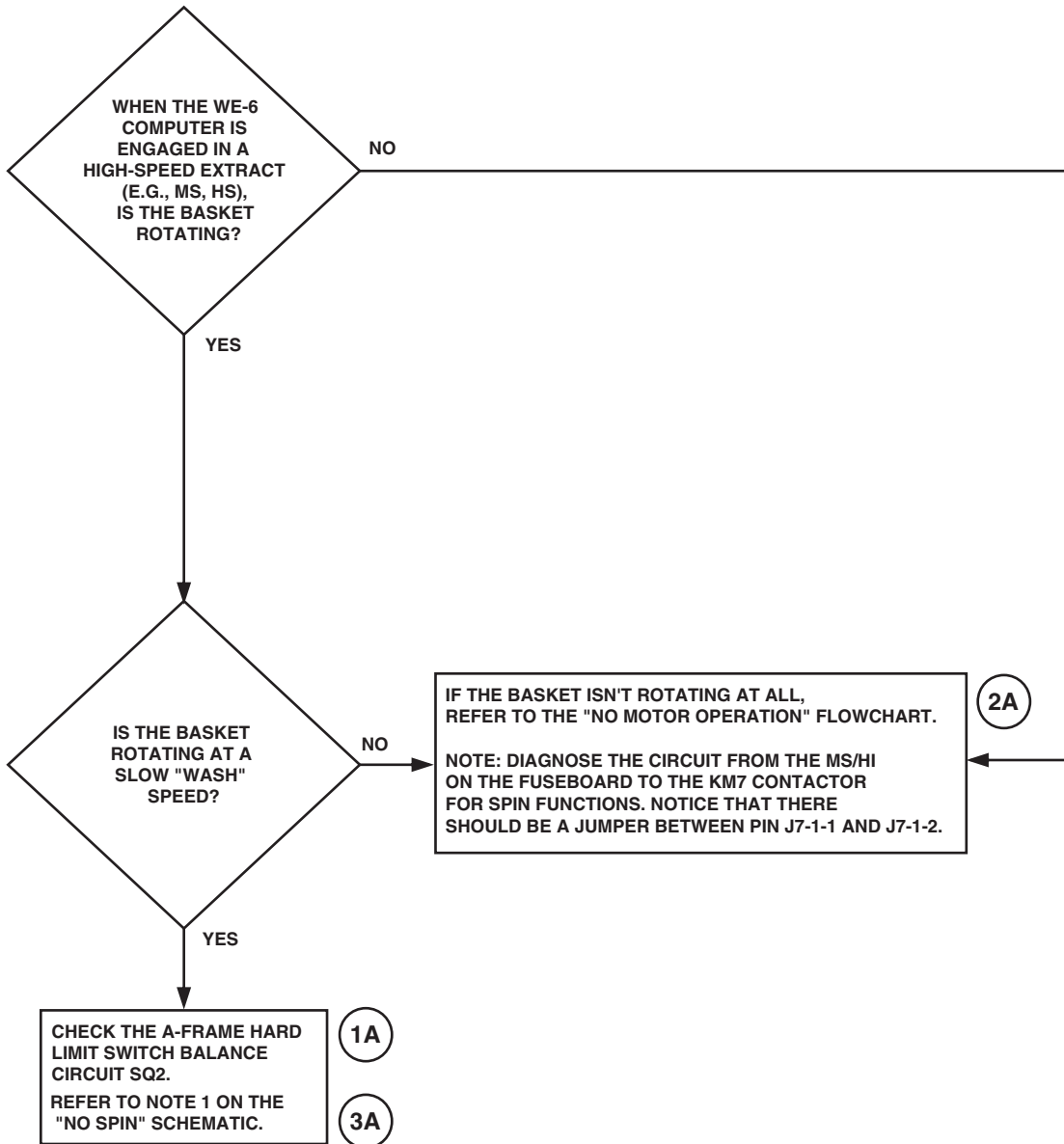
FIGURE 1



PHM2069S
604842M

14. No Spin (220 Volt Control)

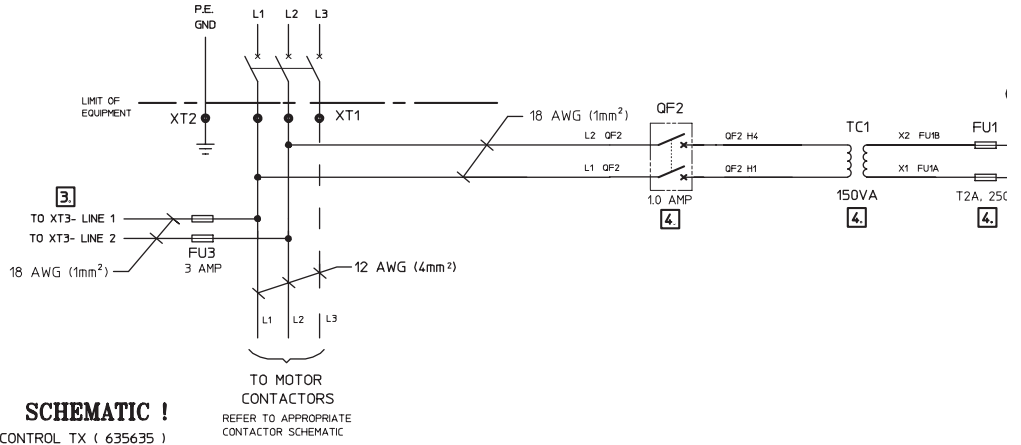
NOTE: WHILE PERFORMING THIS CHECK, MAKE SURE THAT THE WASHER-EXTRACTOR IS RUNNING WITH A NORMAL-SIZE LOAD.



PHM1971S

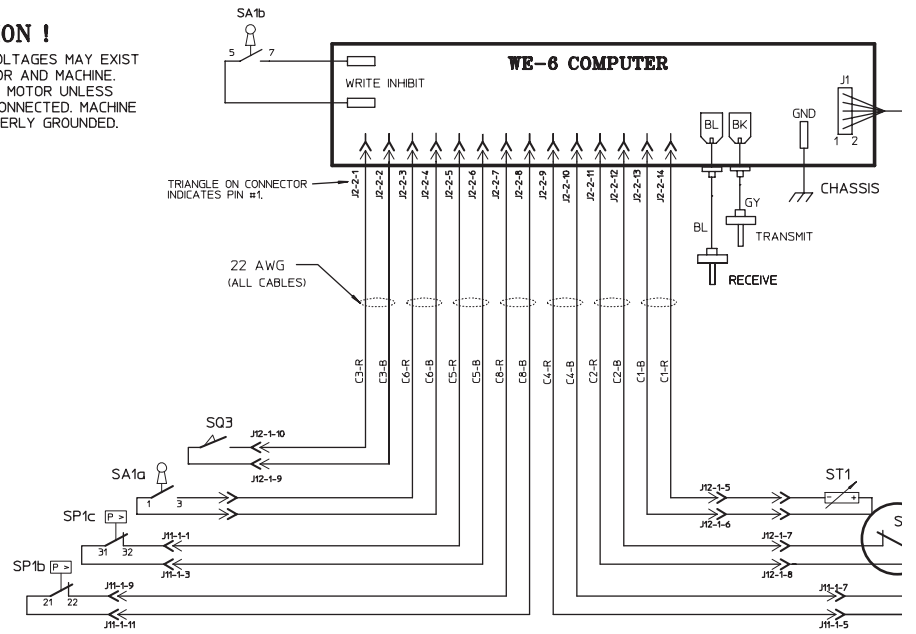
Please refer to the following 2 pages for wiring diagram information.

No Spin (220 Volt Control) (Sheet 1 of 2)



CAUTION !
DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

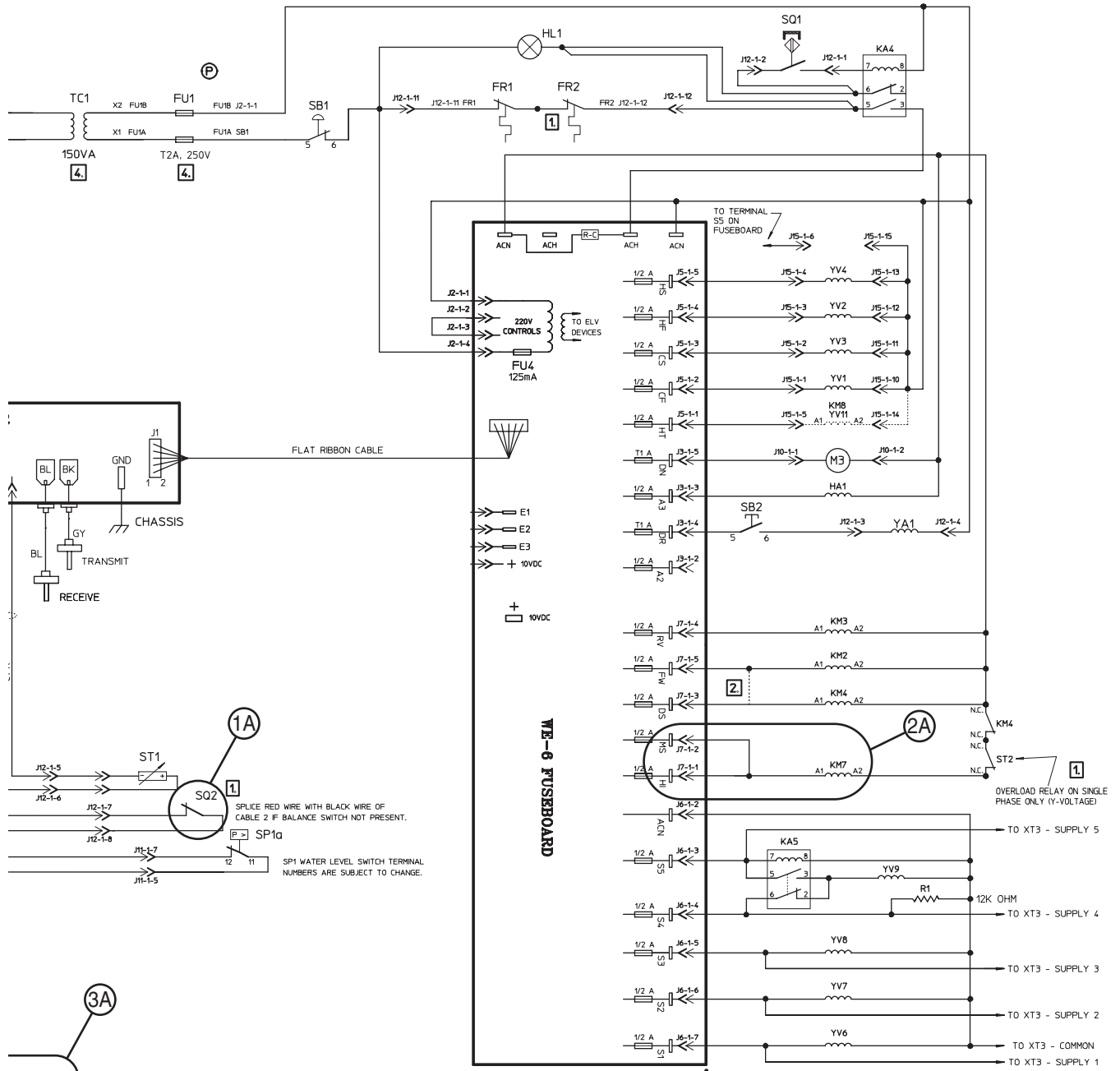
- LEGEND**
- - OPTIONAL CONNECTIONS
 - - CONNECTIONS INTERNAL TO DEVICE
 - FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
 - FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
 - FU1 - FUSE, 2A SLO-BLO 5x20mm
 - FU3 - FUSE, 3A FAST ACTING 5x20mm
 - FU4 - FUSE, 125mA SLO-BLO 5x20mm
 - HA1 - BUZZER, ACOUSTICAL ALARM
 - HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
 - KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
 - KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
 - KM2 - CONTACTOR, FORWARD ROTATION
 - KM3 - CONTACTOR, REVERSE ROTATION
 - KM4 - CONTACTOR, DISTRIBUTION SPEED
 - KM7 - CONTACTOR, HIGH SPEED
 - KM8 - CONTACTOR, ELECTRIC HEAT
 - M3 - DRAIN VALVE, SEWER
 - QF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
 - R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
 - SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
 - SB1 - SWITCH, EMERGENCY STOP
 - SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
 - SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
 - S01 - SWITCH, MAGNETIC DOOR CLOSED
 - S02 - SWITCH, OUT-OF-BALANCE
 - S03 - SWITCH, DOOR LOCKED
 - ST1 - TEMPERATURE PROBE
 - ST2 - RELAY, CURRENT OVERLOAD
 - TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
 - XT1 - TERMINAL BLOCK, INPUT POWER
 - XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
 - XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
 - YA1 - SOLENOID, DOOR UNLOCK
 - YV1 - VALVE, COLD FILL
 - YV2 - VALVE, HOT FILL
 - YV3 - VALVE, COLD SPRAY
 - YV4 - VALVE, HOT SPRAY
 - YV6 - VALVE, SUPPLY 1 FLUSH
 - YV7 - VALVE, SUPPLY 2 FLUSH
 - YV8 - VALVE, SUPPLY 3 FLUSH
 - YV9 - VALVE, SUPPLY 4 FLUSH
 - YV11 - VALVE, STEAM HEAT



- NOTES:**
1. S02 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS.
FRZ (ROTOR THERMAL) NOT USED ON 2 SPEEDS.
ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
 2. CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH T ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WHE
 3. OMIT WIRES TO 'XT3-LINE1', 'XT3-LINE2' & FUSEHOLDER FU3 ON MACHINES WIT
 4. CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (QF2) ARE NOT PRESENT ON 0- THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON 0- & Y-VOLTAGE MA REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANSI

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

No Spin (220 Volt Control) (Sheet 2 of 2)

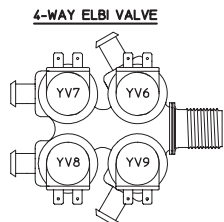


SPEEDS.
DS
F ONLY.

A1 OF KM2 (FWD), ALONG WITH THE WIRE FROM 'FW',
KM4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

SEHOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

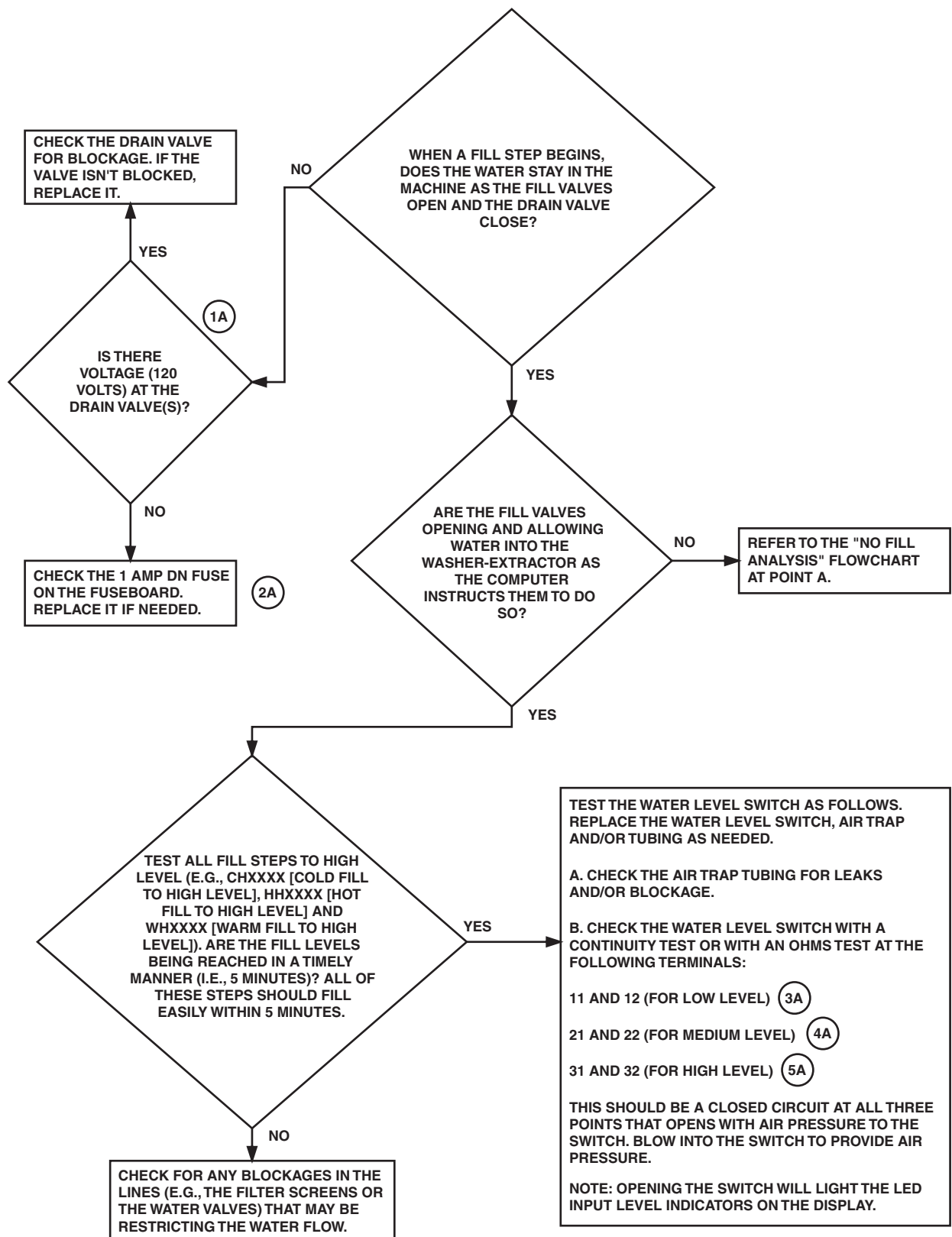
(QF2) ARE NOT PRESENT ON 0- & Y-VOLTAGE MACHINES.
L1 & L2 ON 0- & Y-VOLTAGE MACHINES.
3N DETAILS OF CONTROL TRANSFORMER.



PHM1965S
0604842 (P)

15. Fill Alarm Analysis (120 Volt Control)

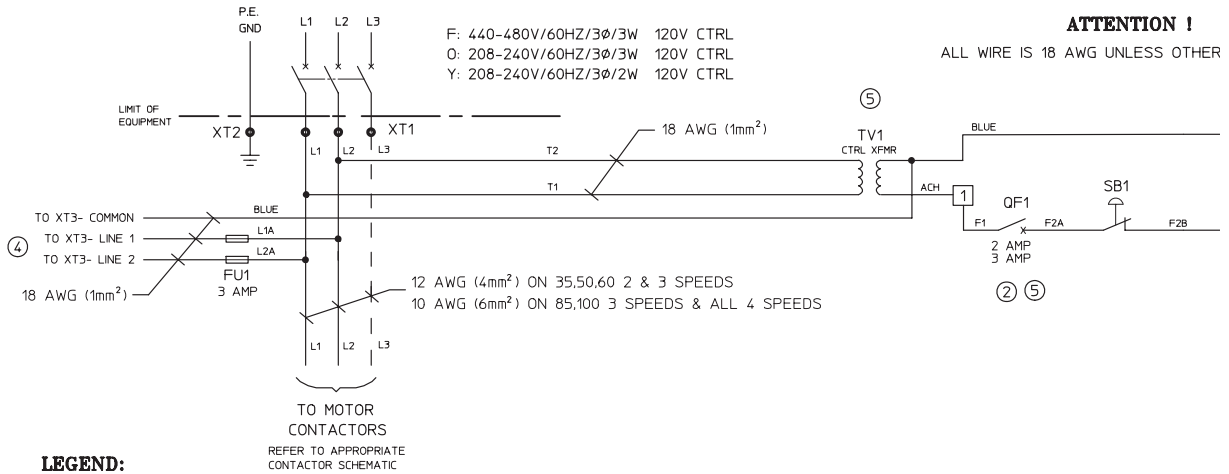
SYMPTOM: THE DISPLAY READS "FILLXX," THE SIGNAL LIGHT ILLUMINATES AND THE BUZZER ALARMS. THE COMPUTER DID NOT RECEIVE AN INPUT FROM THE RESPECTIVE WATER LEVEL CIRCUIT TELLING IT THAT THE WASHER-EXTRACTOR FILLED IN THE TIME PROGRAMMED.



PHM2070S

Please refer to the following 2 pages for wiring diagram information.

Fill Alarm Analysis (120 Volt Control) (Sheet 1 of 2)

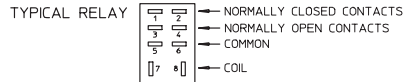


—△— = TERMINAL STRIP JUMPER (TERMINAL STRIP JUMPERS MAY BE USED IN VARIOUS PLACES NOT SHOWN ON SCHEMATIC)

[2] = TERMINAL STRIP, TERMINAL #2

[R-C] = RESISTOR CAPACITOR FILTER NETWORK

C4-B = CABLE #4, BLACK WIRE

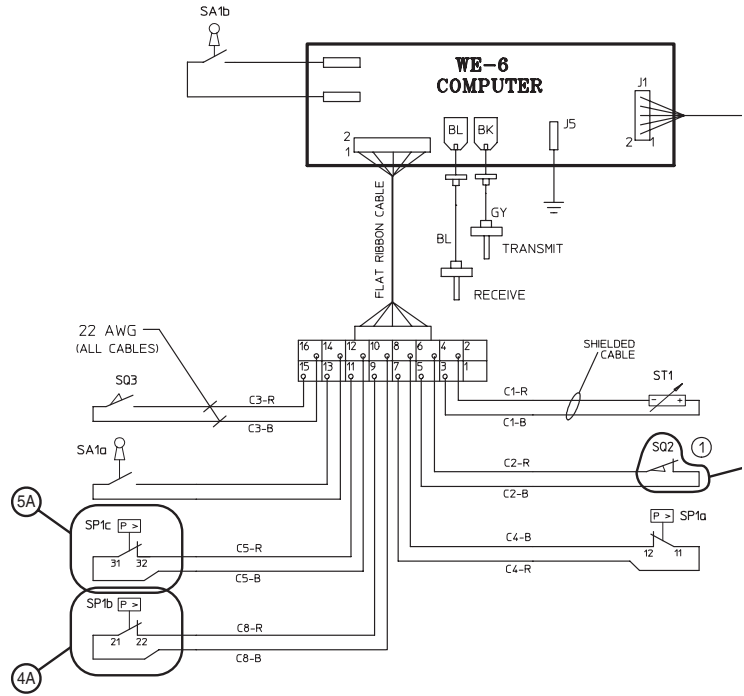


ODD NUMBERED CONTACTS ARE ISOLATED FROM EVEN NUMBERED CONTACTS BUT OPERATE SIMULTANEOUSLY. TERMINAL NUMBERS MAY VARY FROM RELAY TO RELAY BUT TERMINAL POSITIONS ARE THE SAME.

LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- SQ1 = SWITCH MAGNETIC DOOR CLOSED
- SQ2 = SWITCH OUT-OF-BALANCE DETECTION
- SQ3 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN

604842L1 M 1 | 1 drawings - ARCHIVED. Plotted by 'mhronno' on 25-Nov-2002 10:25:52



NOTES:

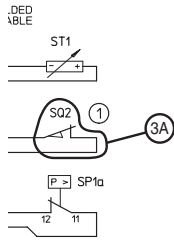
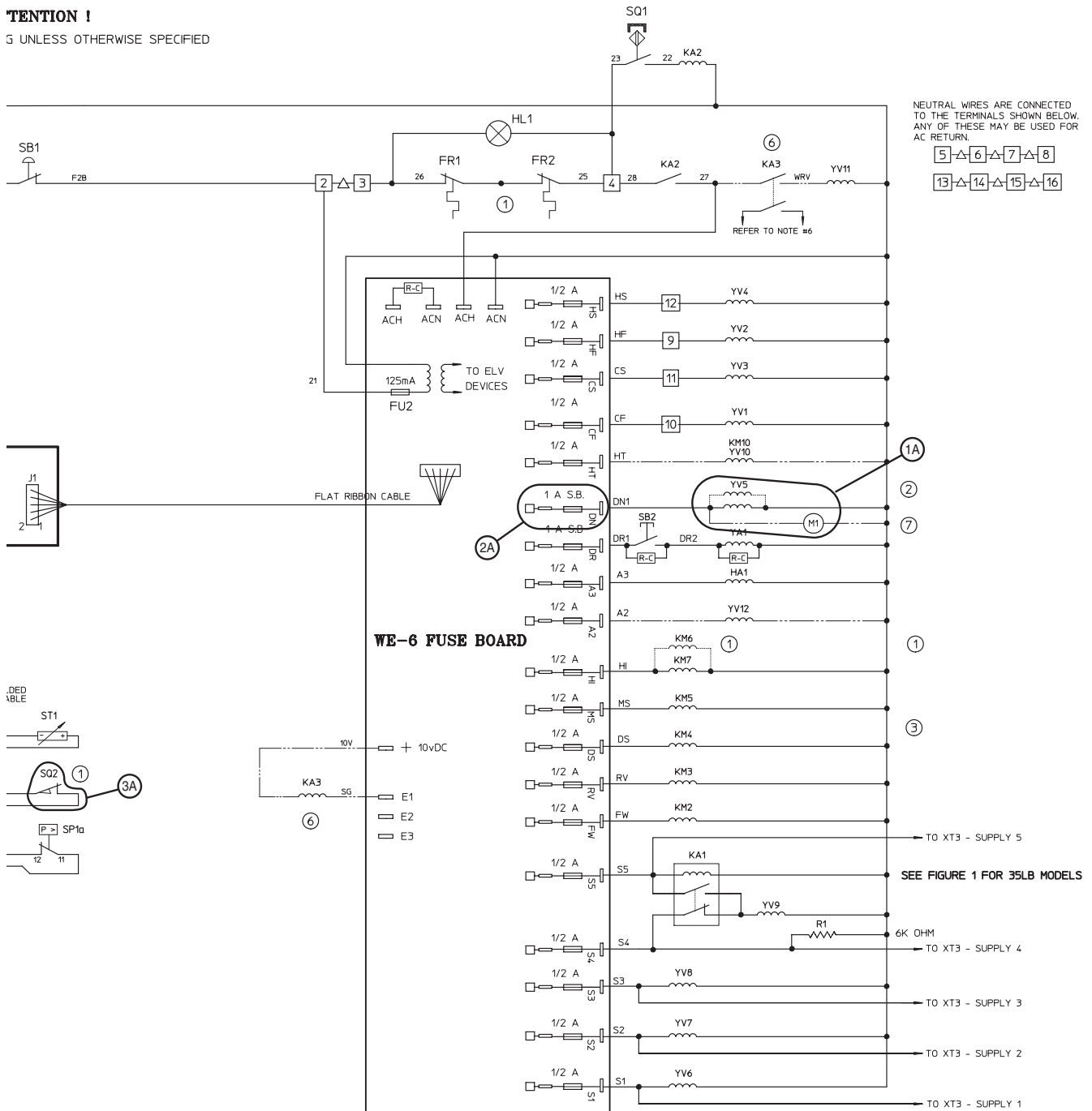
- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAIL USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (RE
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED

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

Fill Alarm Analysis (120 Volt Control) (Sheet 2 of 2)

CAUTION !

GROUND UNLESS OTHERWISE SPECIFIED



DRAINS.
RAINS.

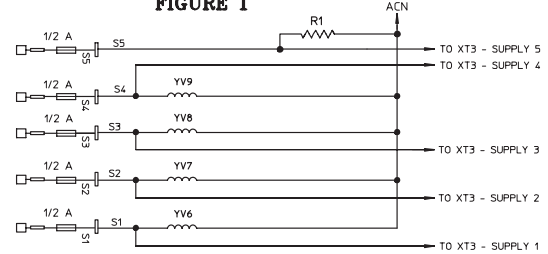
240V.

SEE FIGURE 1 FOR DETAILS.
MP BREAKER (REFER TO NOTE 2).

ACTIVATE
ARRANGEMENT.

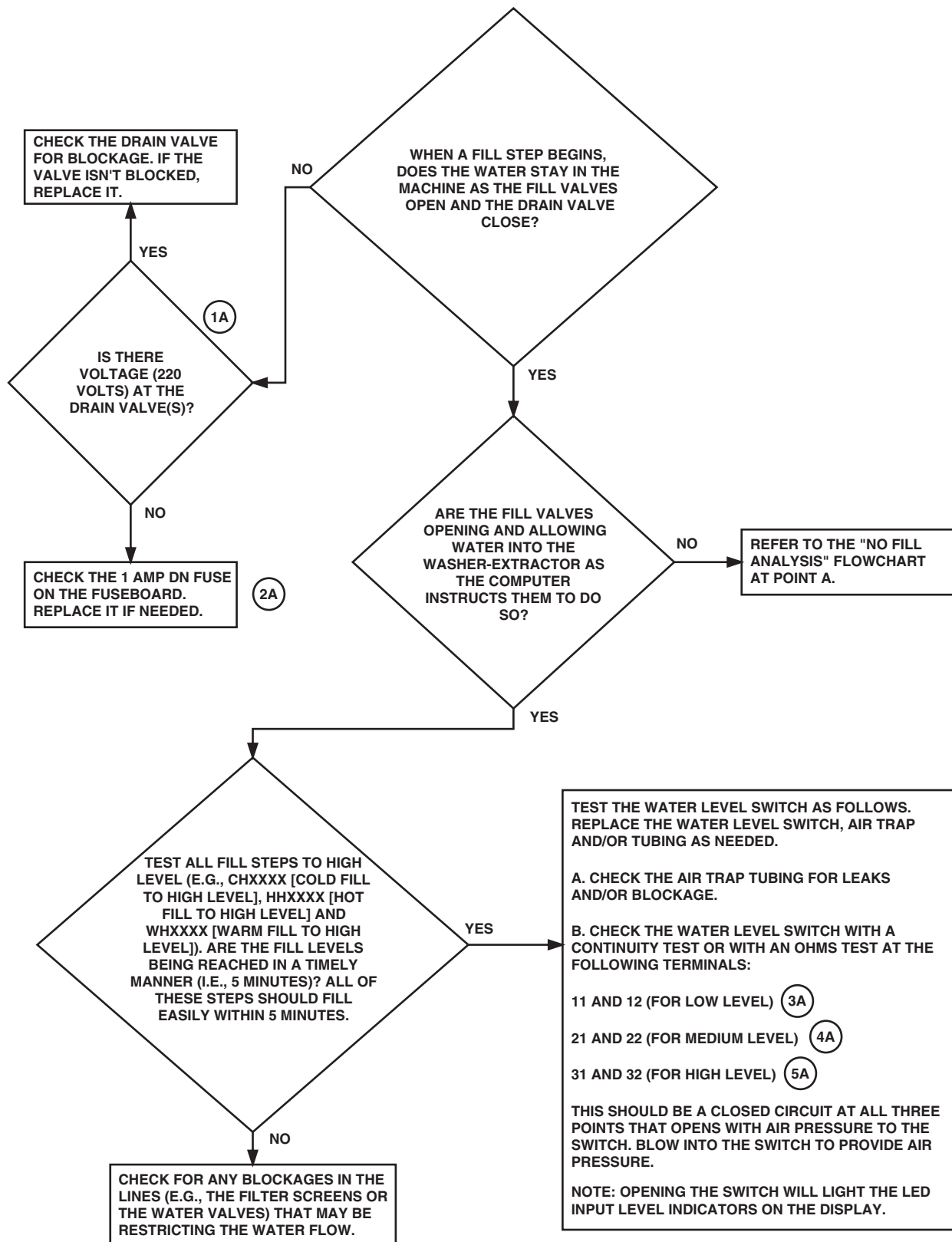
SPECIALLY ORDERED.

FIGURE 1



16. Fill Alarm Analysis (220 Volt Control)

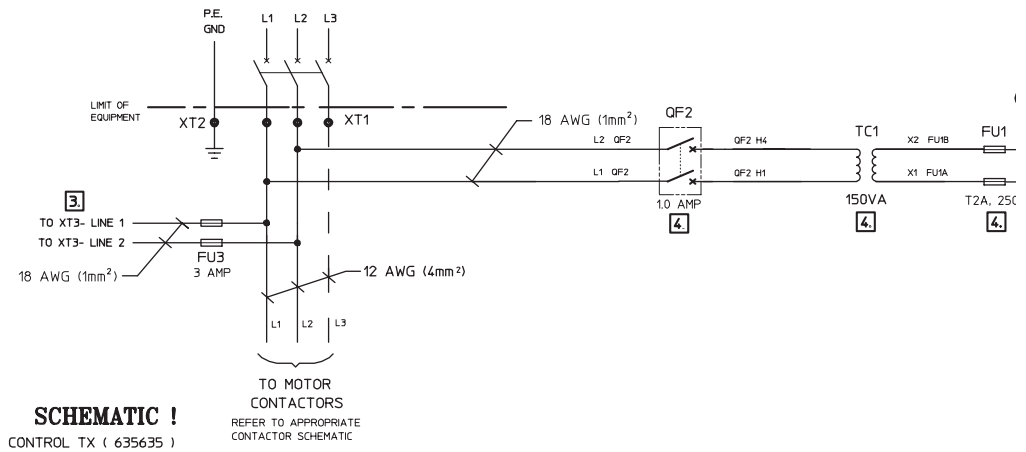
SYMPTOM: THE DISPLAY READS "FILLXX," THE SIGNAL LIGHT ILLUMINATES AND THE BUZZER ALARMS. THE COMPUTER DID NOT RECEIVE AN INPUT FROM THE RESPECTIVE WATER LEVEL CIRCUIT TELLING IT THAT THE WASHER-EXTRACTOR FILLED IN THE TIME PROGRAMMED.



PHM1960S

Please refer to the following 2 pages for wiring diagram information.

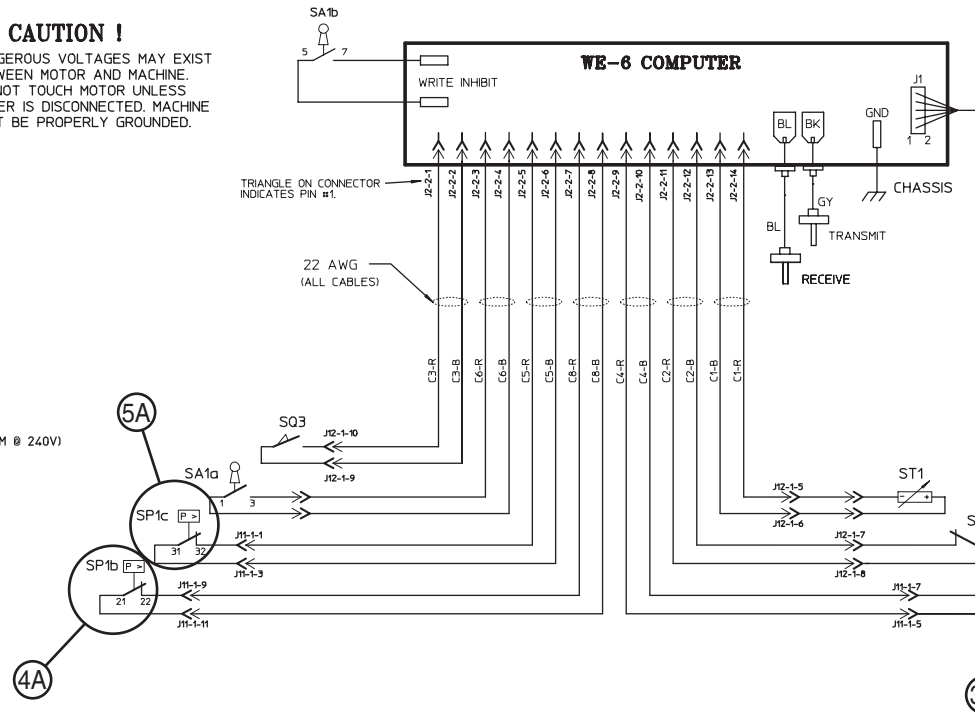
Fill Alarm Analysis (220 Volt Control) (Sheet 1 of 2)



CAUTION !
DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

LEGEND

- - OPTIONAL CONNECTIONS
- - CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- QF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- S01 - SWITCH, MAGNETIC DOOR CLOSED
- S02 - SWITCH, OUT-OF-BALANCE
- S03 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT

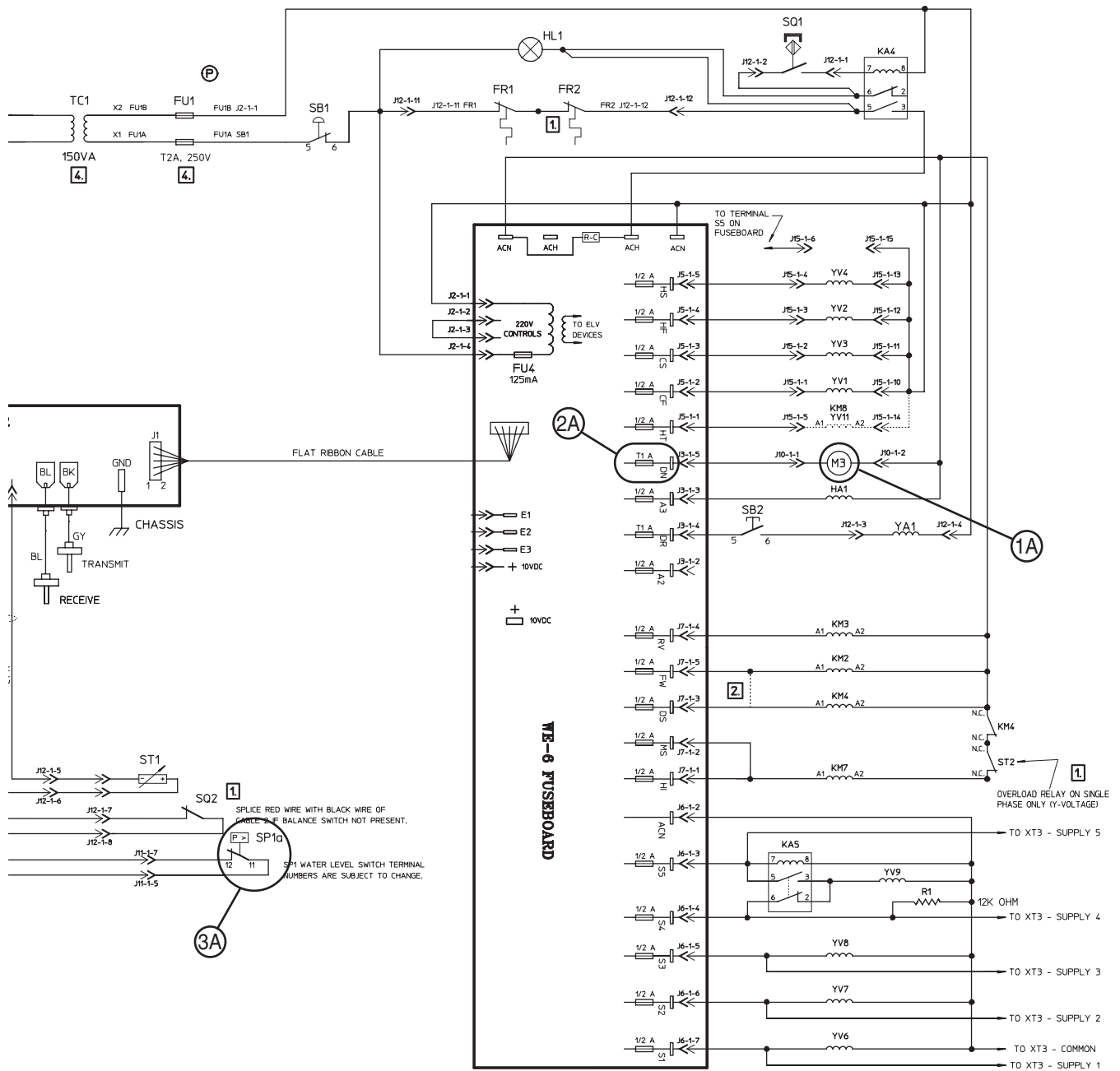


NOTES:

- 1 S02 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS. ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
- 2 CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH T ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WHE
- 3 OMIT WIRES TO "XT3-LINE1", "XT3-LINE2" & FUSEHOLDER FU3 ON MACHINES WIT
- 4 CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (QF2) ARE NOT PRESENT ON 0-THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON 0- & Y-VOLTAGE MA REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANSI

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

Fill Alarm Analysis (220 Volt Control) (Sheet 2 of 2)



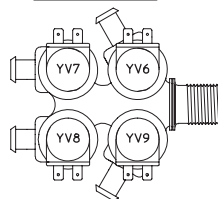
SPEEDS.
DS.
ONLY.

A1 OF KM2 (FWD), ALONG WITH THE WIRE FROM "FW",
KM4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

SEHOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

(QF2) ARE NOT PRESENT ON O- & Y-VOLTAGE MACHINES.
L1 & L2 ON O- & Y-VOLTAGE MACHINES.
3N DETAILS OF CONTROL TRANSFORMER.

4-WAY ELBI VALVE

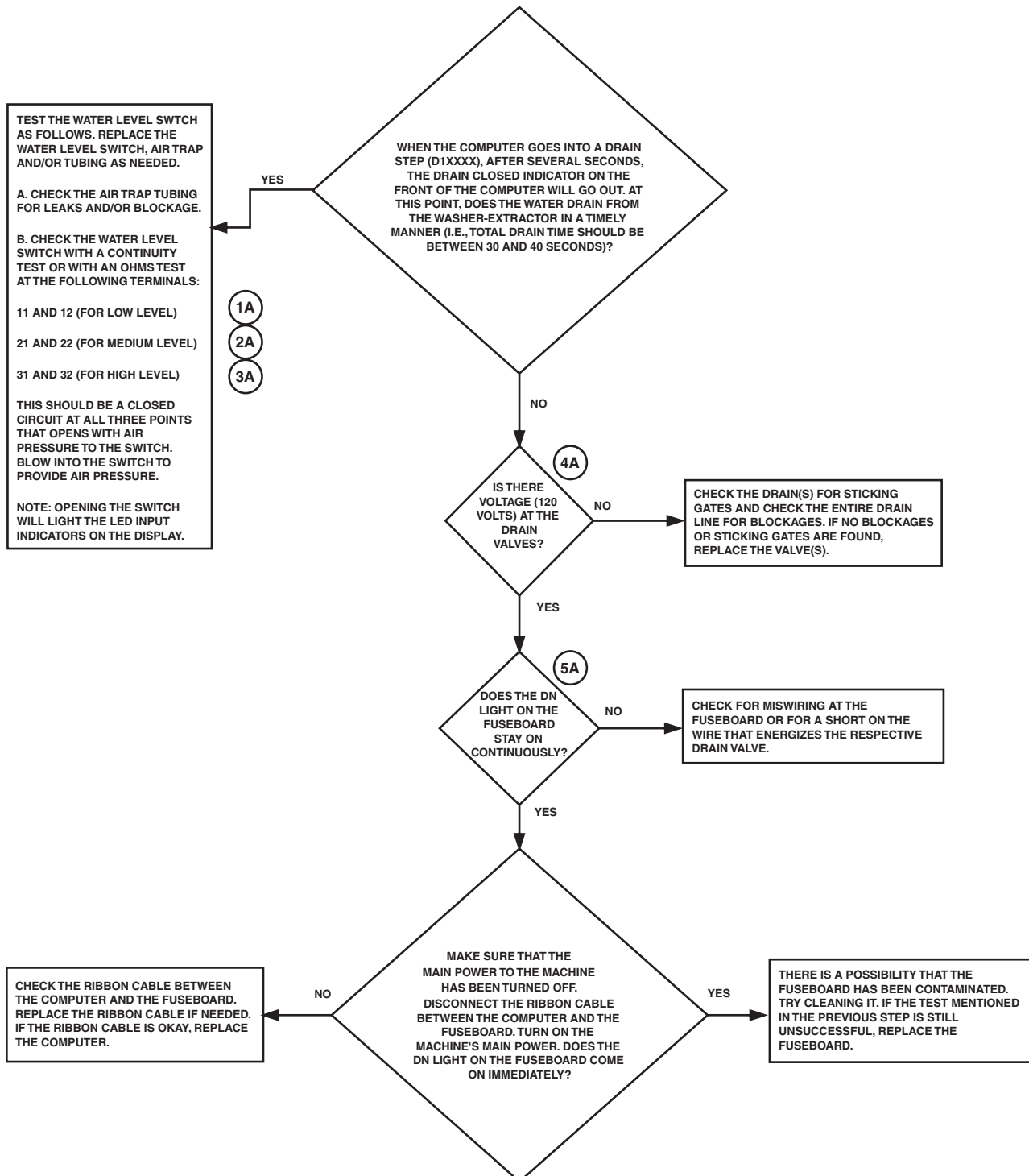


PHM1961S
0604842 (P)

17. Empty Alarm Analysis (120 Volt Control)

SYMPTOM: THE DISPLAY READS "EMTYXX," THE BUZZER SOUNDS AND THE SIGNAL LIGHT IS DISPLAYED. THE COMPUTER DID NOT RECEIVE AN INPUT FROM THE LOW SIDE OF THE WATER LEVEL SWITCH TELLING IT THAT THE WASHER-EXTRACTOR EMPTIED IN THE TIME THAT HAD BEEN PROGRAMMED.

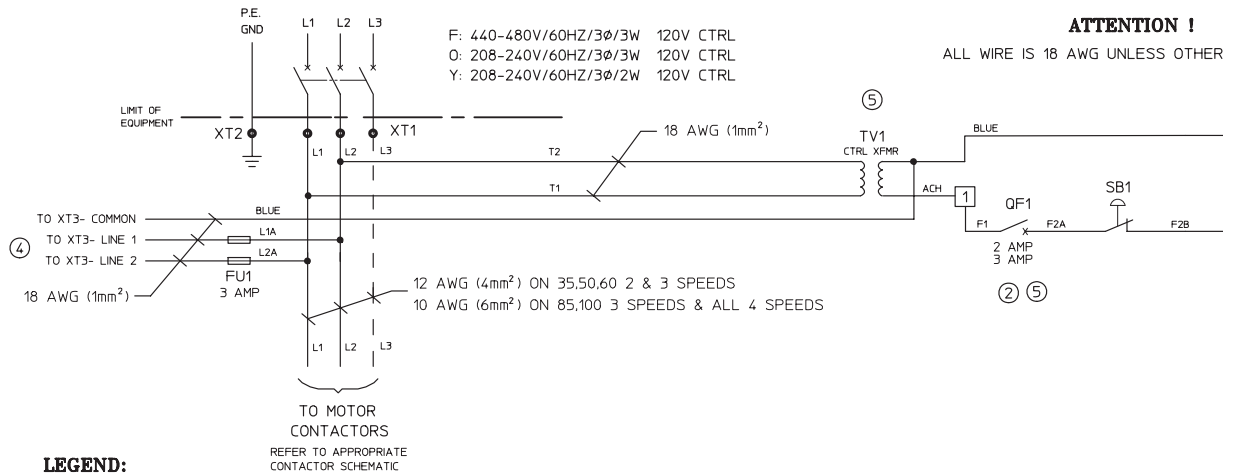
NOTE: IF THE EMPTY ALARM OCCURS IN LESS THAN ONE MINUTE FROM THE POINT WHEN THE DRAIN CLOSED LIGHT GOES OUT, CHECK THE DRAIN TIME THAT HAS BEEN PROGRAMMED INTO THIS STEP OF THE COMPUTER. THE FACTORY RECOMMENDS THAT AT LEAST ONE MINUTE SHOULD BE PROVIDED FOR EACH DRAIN STEP.



PHM2072S

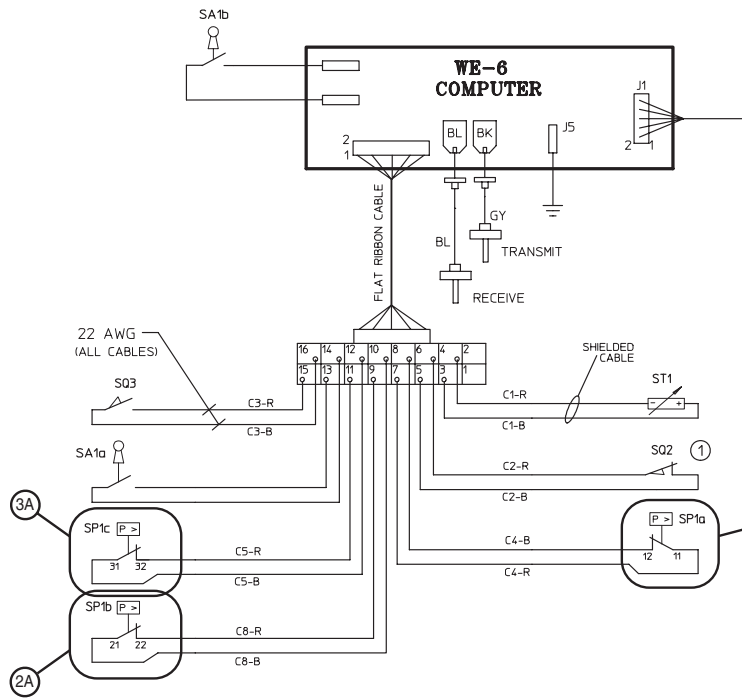
Please refer to the following 2 pages for wiring diagram information.

Empty Alarm Analysis (120 Volt Control) (Sheet 1 of 2)



LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL RELAY
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- SQ1 = SWITCH MAGNETIC DOOR CLOSED
- SQ2 = SWITCH OUT-OF-BALANCE DETECTION
- SQ3 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN



NOTES:

- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAIL USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (RE)
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED

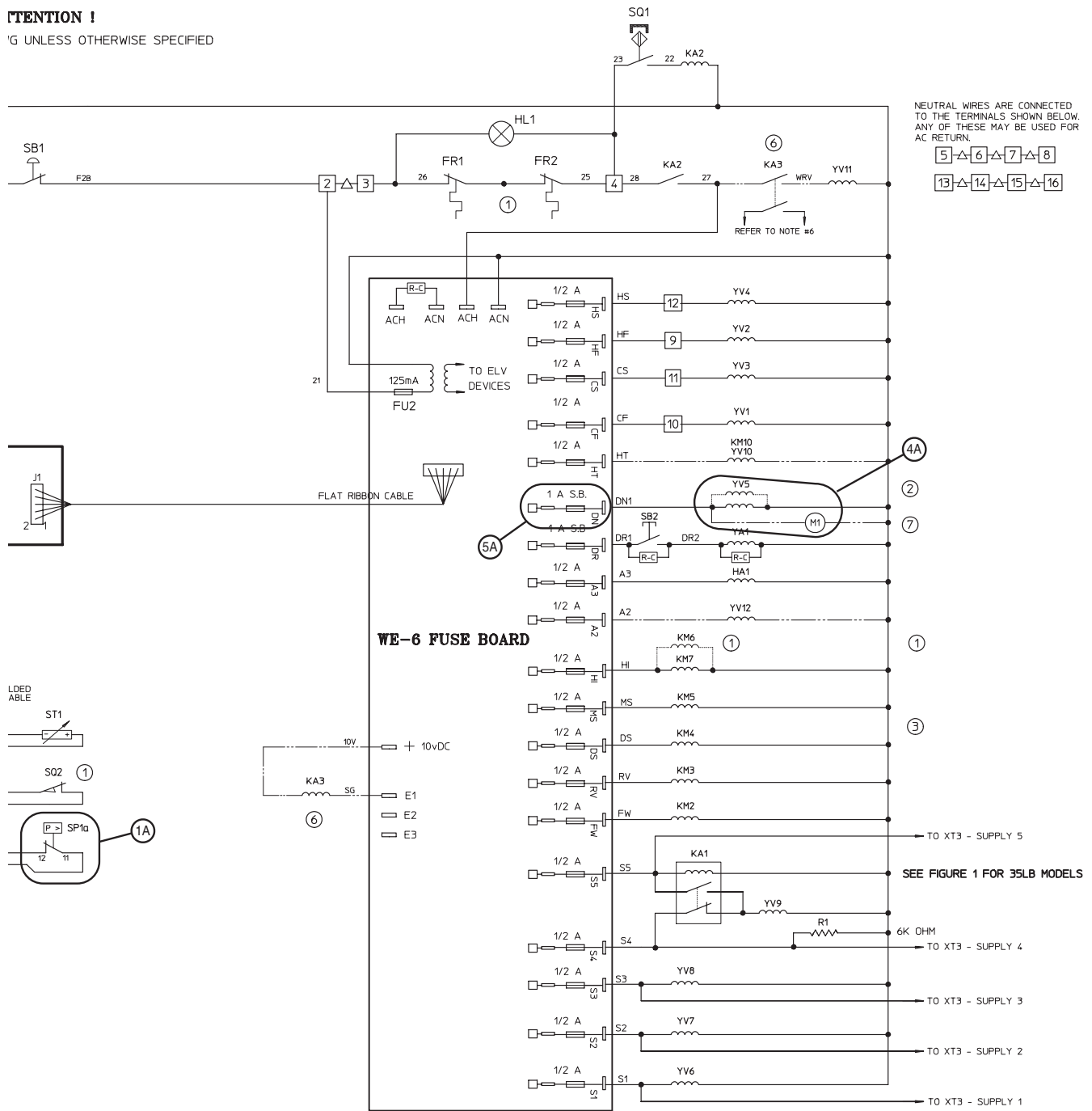
60482_L | H | 1 | 1 | drawings - ARCHIVED. Plotted by 'shannon' on 25-Nov-2002 10:25:52

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

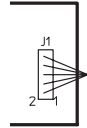
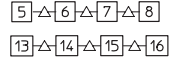
Empty Alarm Analysis (120 Volt Control) (Sheet 2 of 2)

ATTENTION !

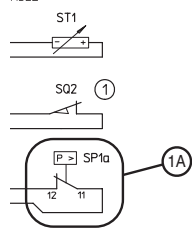
120V AC UNLESS OTHERWISE SPECIFIED



NEUTRAL WIRES ARE CONNECTED TO THE TERMINALS SHOWN BELOW. ANY OF THESE MAY BE USED FOR AC RETURN.

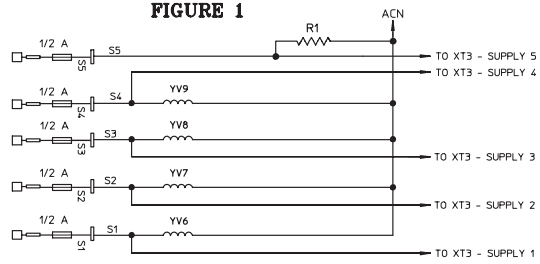


LEDABLE



WE-6 FUSE BOARD

FIGURE 1



- 1) DRAINS.
- 2) DRAINS.
- 3) 240V.
- 4) 01896 FOR DETAILS.
- 5) AMP BREAKER (REFER TO NOTE 2).
- 6)) ACTIVATE T ARRANGEMENT.
- 7)) SPECIALLY ORDERED.

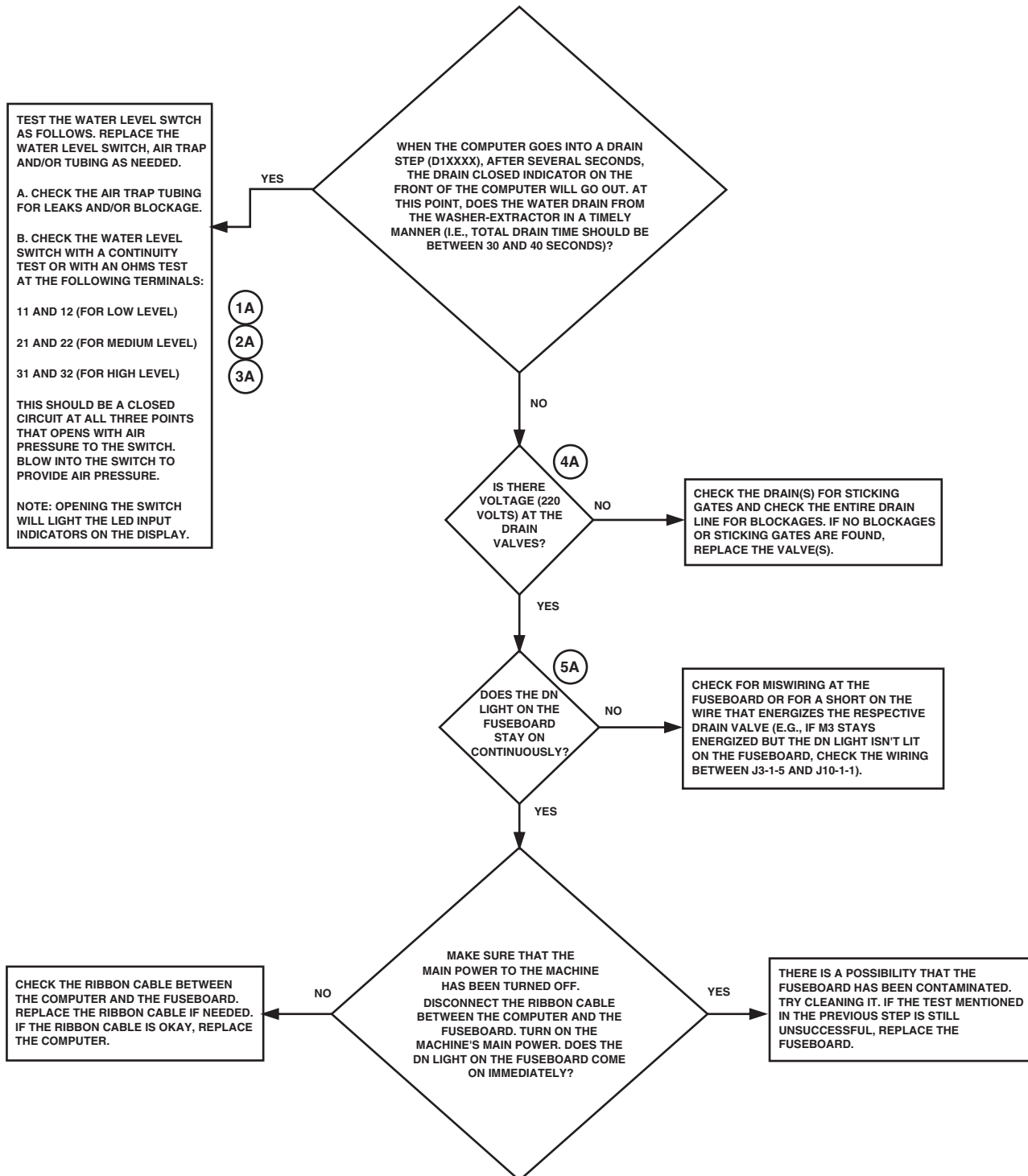
SEE FIGURE 1 FOR 35LB MODELS

PHM2073S
604842M

18. Empty Alarm Analysis (220 Volt Control)

SYMPTOM: THE DISPLAY READS "EMTYXX," THE BUZZER SOUNDS AND THE SIGNAL LIGHT IS DISPLAYED. THE COMPUTER DID NOT RECEIVE AN INPUT FROM THE LOW SIDE OF THE WATER LEVEL SWITCH TELLING IT THAT THE WASHER-EXTRACTOR EMPTIED IN THE TIME THAT HAD BEEN PROGRAMMED.

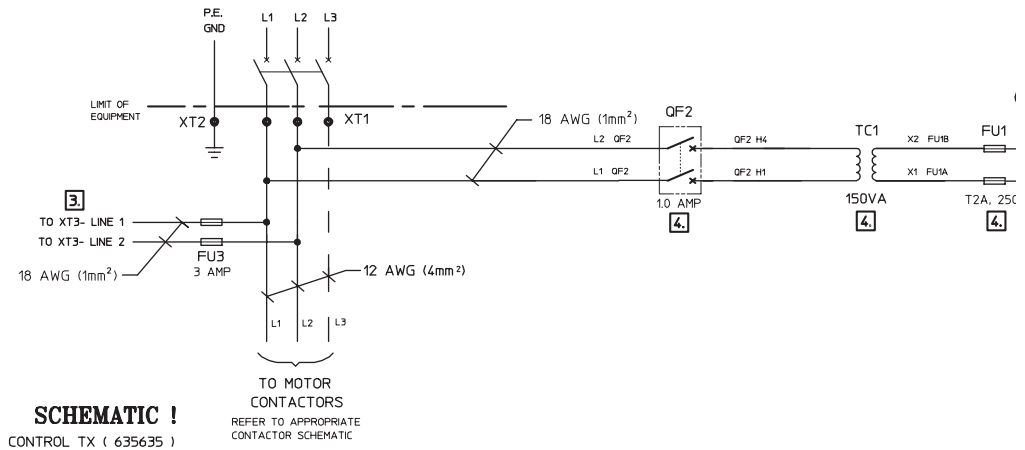
NOTE: IF THE EMPTY ALARM OCCURS IN LESS THAN ONE MINUTE FROM THE POINT WHEN THE DRAIN CLOSED LIGHT GOES OUT, CHECK THE DRAIN TIME THAT HAS BEEN PROGRAMMED INTO THIS STEP OF THE COMPUTER. THE FACTORY RECOMMENDS THAT AT LEAST ONE MINUTE SHOULD BE PROVIDED FOR EACH DRAIN STEP.



PHM1962S

Please refer to the following 2 pages for wiring diagram information.

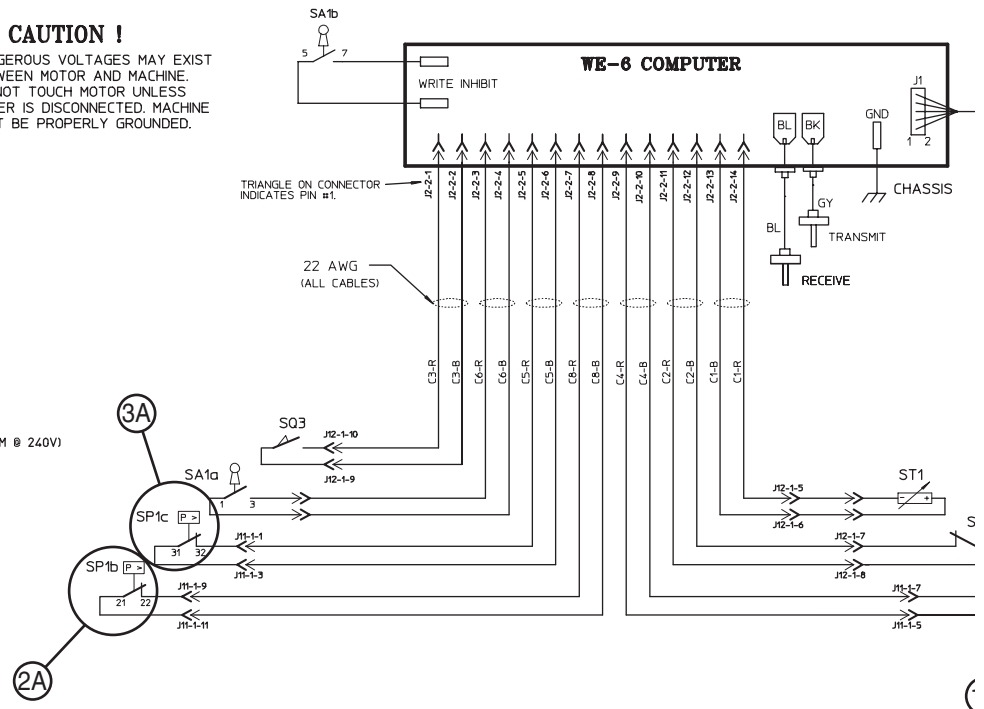
Empty Alarm Analysis (220 Volt Control) (Sheet 1 of 2)



CAUTION !
DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

LEGEND

- - OPTIONAL CONNECTIONS
- - CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KA5 - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- QF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- SQ1 - SWITCH, MAGNETIC DOOR CLOSED
- SQ2 - SWITCH, OUT-OF-BALANCE
- SQ3 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT



NOTES:

1. SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS. ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
2. CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH T ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WHE
3. OMIT WIRES TO "XT3-LINE1", "XT3-LINE2" & FUSEHOLDER FU3 ON MACHINES WIT
4. CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (QF2) ARE NOT PRESENT ON O-THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON O- & Y-VOLTAGE MA REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANSI

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

19. Automatic Supply Dispenser Analysis

Program and run the following steps into any available cycle to test the system.

NOTE: Pre-programmed cycle 38 already has a portion of this cycle pre-programmed into it.

Step	Description	Program	Min:sec
1	Warm Fill to Low Level	Warm Fill	5:00
2	Supply 1	Supply 1	2:00
3	Supply 2	Supply 2	2:00
4	Supply 3	Supply 3	2:00
5	Supply 4	Supply 4	2:00
6	Supply 5	Supply 5	2:00
7	Wash 1	Wash	:30
8	Drain 1	Drain	1:00

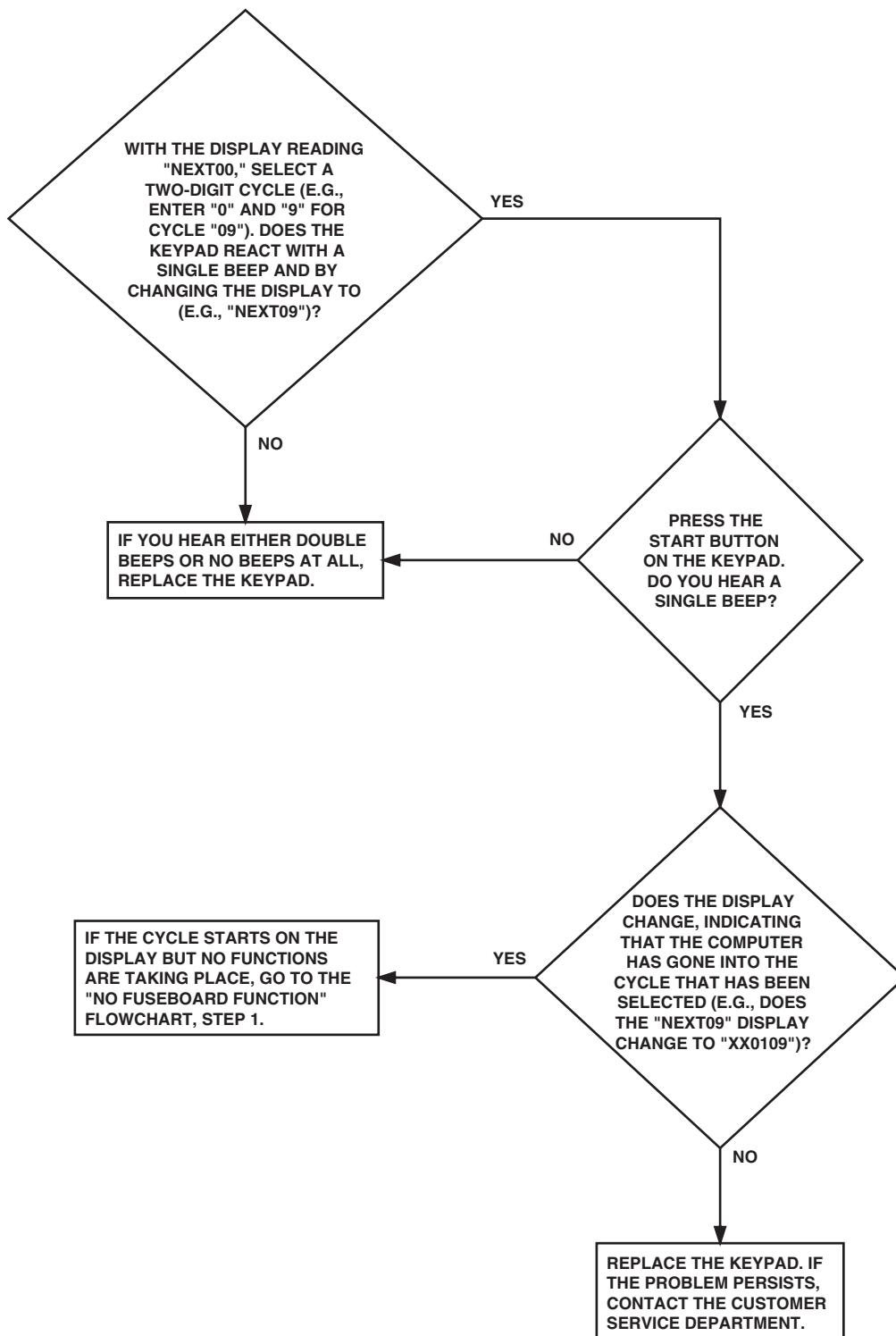
Run the cycle and, with the respective supply on the main display, refer to the following chart for the function that should be occurring:

Supply	Function
1	Flushes Compartment 1
2	Flushes Compartment 2
3	Flushes Compartment 3
4	Flushes Compartments 4 and 5
5	Flushes Compartments 4 and 5

During each step, test for voltage (220 Volts) between each respective supply terminal and the common terminal on the XT3 terminal strip.

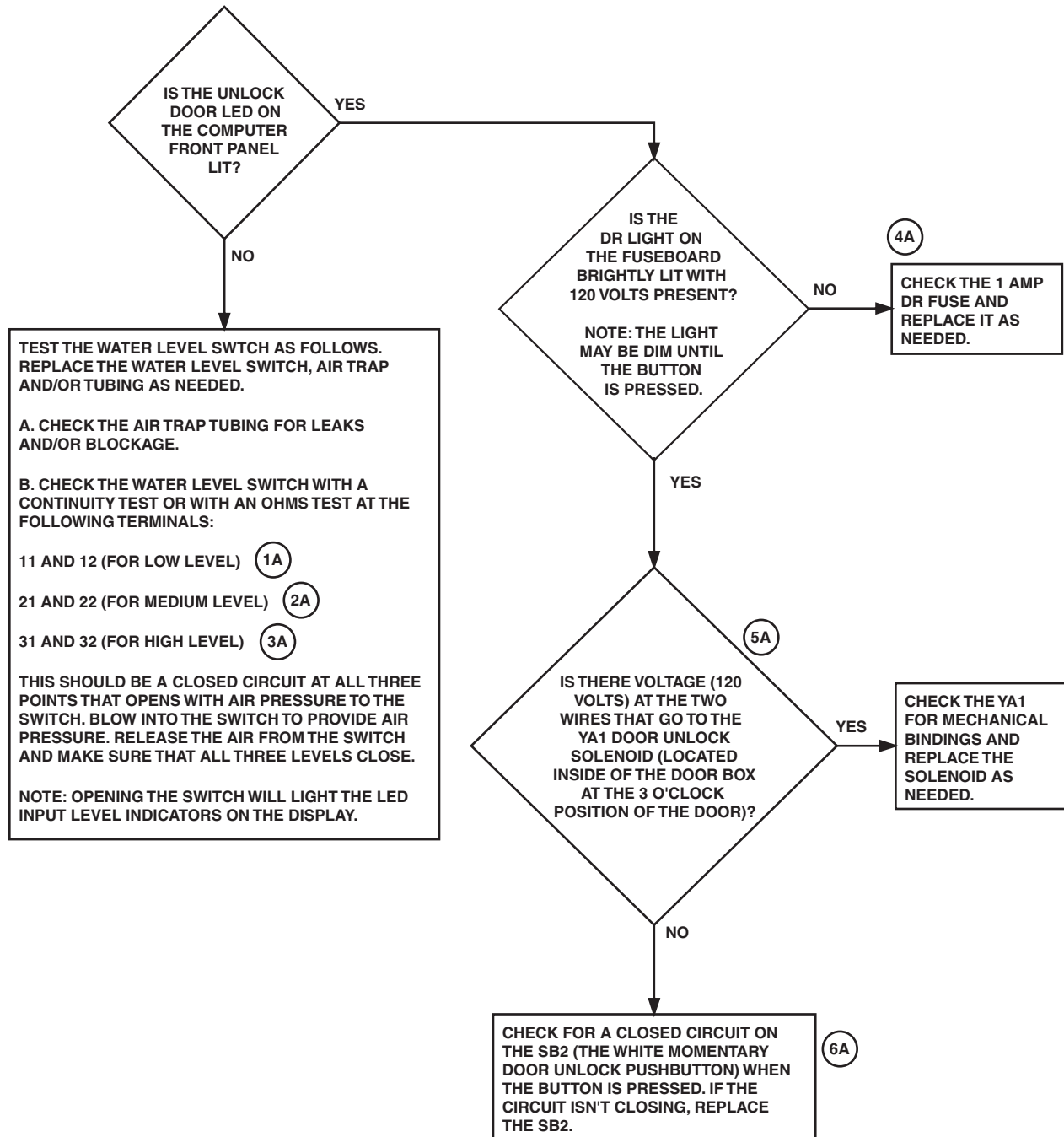
NOTE: The XT3 terminal strip is located toward the back of the control module, next to the power input block.

20. No Keypad Functions



PHM1932S

21. Door Unlocking Function (120 Volt Control)

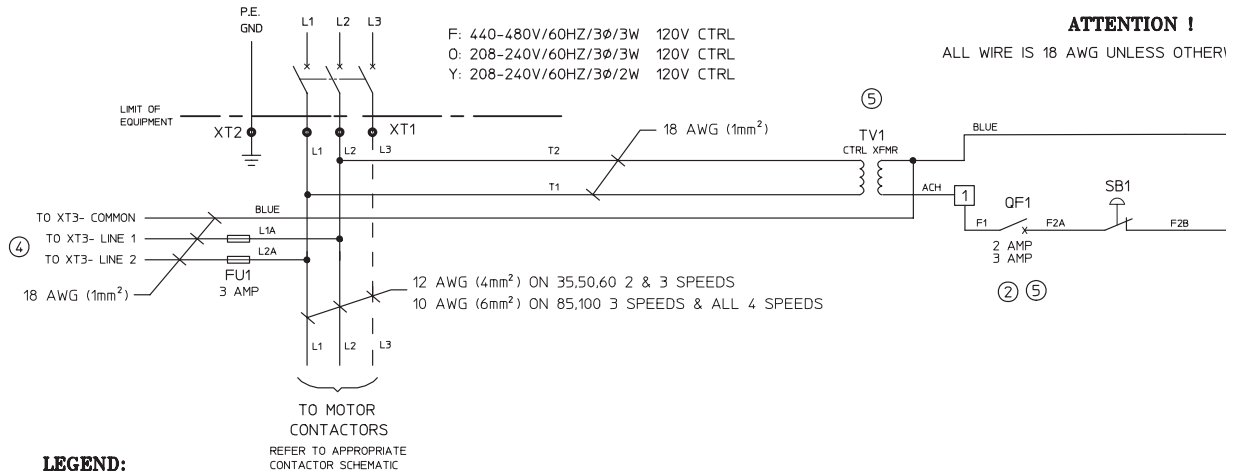


PHM2074S

Please refer to the following 2 pages for wiring diagram information.

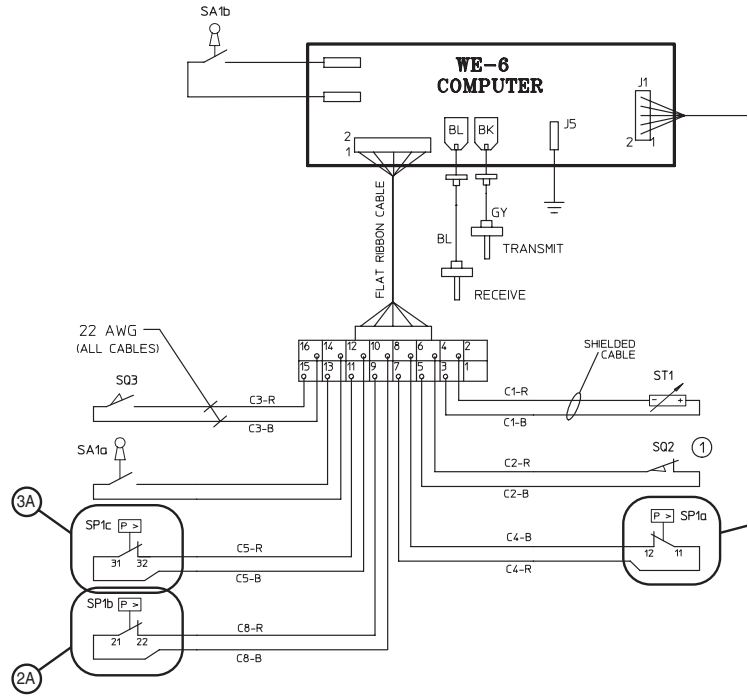
Troubleshooting

Door Unlocking Function (120 Volt Control) (Sheet 1 of 2)



LEGEND OF COMPONENTS

- FU1 = FUSE 3 AMP FAST ACTING (EXT SUPPLY)
- FU2 = FUSE 125mA SLO-BLO 5X20mm
- FR1 = SWITCH LOW SPEED MOTOR OVER-TEMPERATURE
- FR2 = SWITCH HIGH SPEED MOTOR OVER-TEMPERATURE
- HA1 = SIGNAL ACCOUSTICAL WE-6 ALARM
- HL1 = SIGNAL OPTICAL DRIVE MOTORS THERMAL OVERLOAD INDICATOR
- KA1 = RELAY FIFTH SUPPLY (COIL & CONTACTS)
- KA2 = RELAY DOOR SAFETY (COIL & CONTACTS)
- KA3 = RELAY WATER REUSE FILL VALVE
- KM2 = CONTACTOR FORWARD ROTATION
- KM3 = CONTACTOR REVERSE ROTATION
- KM4 = CONTACTOR DISTRIBUTION SPEED
- KM5 = CONTACTOR MEDIUM SPEED
- KM6 = CONTACTOR MEDIUM WINDING SHORTING
- KM7 = CONTACTOR HIGH SPEED
- KM10 = CONTACTOR ELECT HEAT
- M1 = MOTOR COOLING FAN
- QF1 = CIRCUIT BREAKER CONTROL CIRCUIT
- R1 = RESISTOR 6K OHM SUPPLY RELAY
- R-C = RESISTOR-CAPACITOR NETWORK
- SA1a = SWITCH COMPUTER RUN/WRITE ENABLE
- SA1b = SWITCH COMPUTER RUN/WRITE ENABLE
- SB1 = SWITCH EMERGENCY STOP
- SB2 = SWITCH DOOR UNLOCK
- SP1a = SWITCH WATER PRESSURE LOW LEVEL
- SP1b = SWITCH WATER PRESSURE MEDIUM LEVEL
- SP1c = SWITCH WATER PRESSURE HIGH LEVEL
- SO1 = SWITCH MAGNETIC DOOR CLOSED
- SO2 = SWITCH OUT-OF-BALANCE DETECTION
- SO3 = SWITCH DOOR LOCKED DETECTION
- ST1 = SENSOR WATER TEMPERATURE
- TV1 = CONTROL TRANSFORMER 150VA & 250VA
- XT1 = TERMINAL INPUT POWER DISTRIBUTION
- XT2 = TERMINAL PROTECTIVE EARTH GROUND
- XT3 = TERMINAL EXTERNAL SUPPLY
- YA1 = SOLENOID DOOR UNLOCK
- YV1 = VALVE COLD FILL
- YV2 = VALVE HOT FILL
- YV3 = VALVE COLD SPRAY
- YV4 = VALVE HOT SPRAY
- YV5 = VALVE SEWER DRAIN
- YV6 = VALVE SUPPLY 1 FLUSH
- YV7 = VALVE SUPPLY 2 FLUSH
- YV8 = VALVE SUPPLY 3 FLUSH
- YV9 = VALVE SUPPLY 4 FLUSH
- YV10 = VALVE STEAM HEAT
- YV11 = VALVE WATER REUSE FILL
- YV12 = VALVE WATER REUSE DRAIN



NOTES:

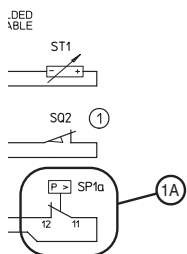
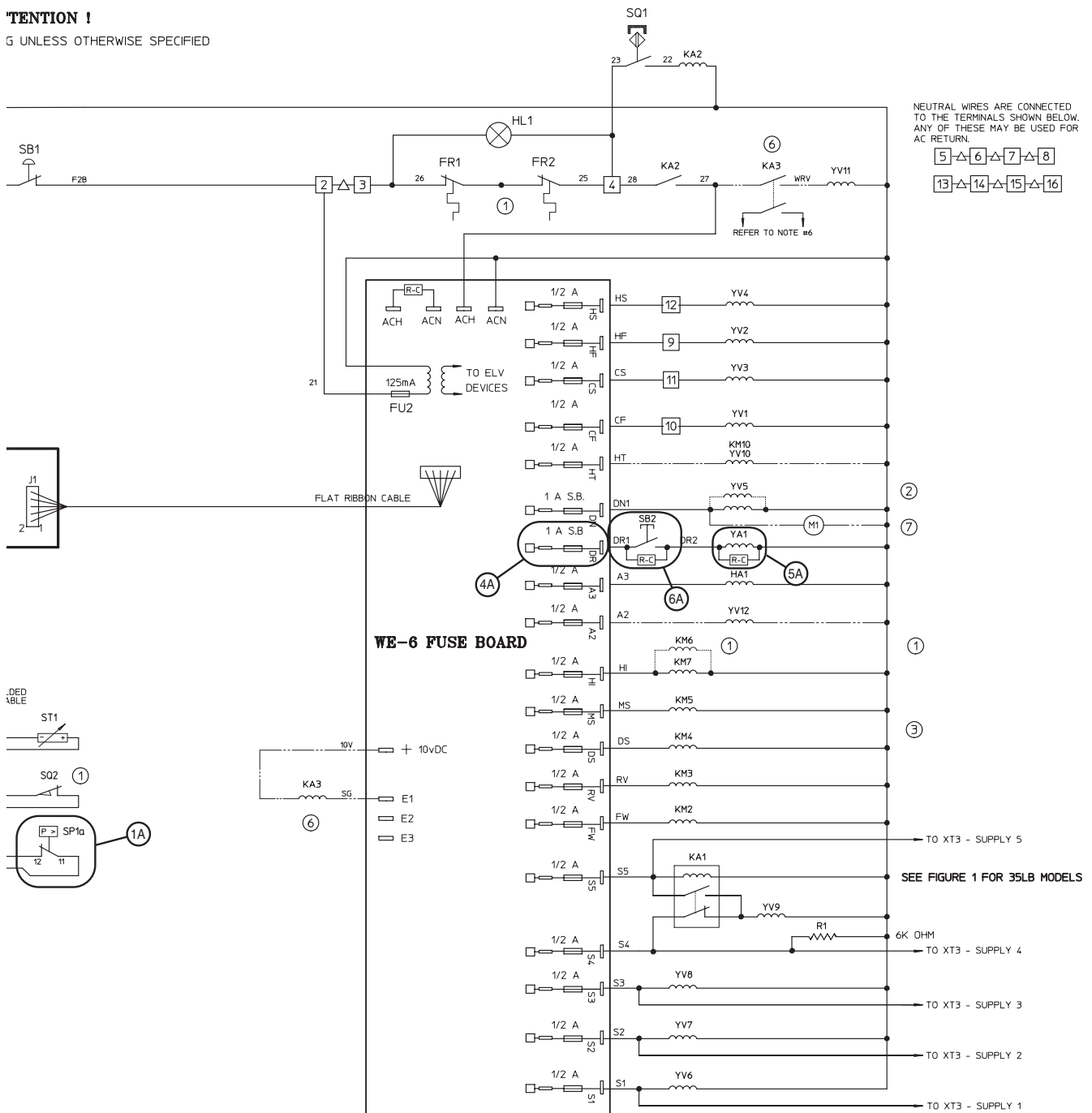
- ① KM6 (MED. SHORT) USED ONLY ON UW65,80,85 & 100. SO2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS.
- ② 2 AMP BREAKER ON ALL UW35-60. ALSO ON UW65-100 WITH AIR-OPERATED DRAINS. 3 AMP BREAKER ON ALL MACHINES WITH DUAL ELECTRICALLY OPERATED DRAINS.
- ③ JUMPER 'DS' TO 'FW' & 'MS' TO 'HI' ON UW35-60 2 SPEEDS. JUMPER 'MS' TO 'HI' ON UW35-60 3 SPEEDS. JUMPER 'DS' TO 'FW' ON UW85-100 3 SPEEDS. OMIT CORRESPONDING CONTACTORS WHEN JUMPING OUTPUTS OF FUSEBOARD. REFER TO CONTACTOR SCHEMATIC FOR DETAILS.
- ④ OMIT 'L1A' AND 'L2A' ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.
- ⑤ CONTROL CIRCUIT TRANSFORMER - REFER TO TRANSFORMER SCHEMATIC #601896 FOR DETAIL USE 150VA XFMR ON MACHINES WITH 2 AMP BREAKER AND 250VA WITH 3 AMP BREAKER (REF)
- ⑥ WATER REUSE RELAY HAS AN ISOLATED SET OF CONTACTS AVAILABLE TO ACTIVATE CUSTOMER SUPPLIED REFILL PUMP. REFER TO LEGEND FOR RELAY CONTACT ARRANGEMENT.
- ⑦ WASH MOTOR COOLING FAN ONLY USED ON 4 SPEED MACHINES OR WHEN SPECIALLY ORDERED

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

Door Unlocking Function (120 Volt Control) (Sheet 2 of 2)

ATTENTION !

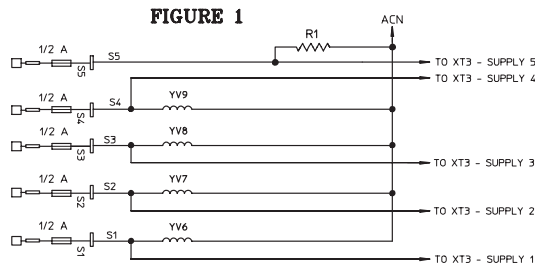
ALL WIRING IS TO BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) UNLESS OTHERWISE SPECIFIED



DRAINS.
DRAINABLE.

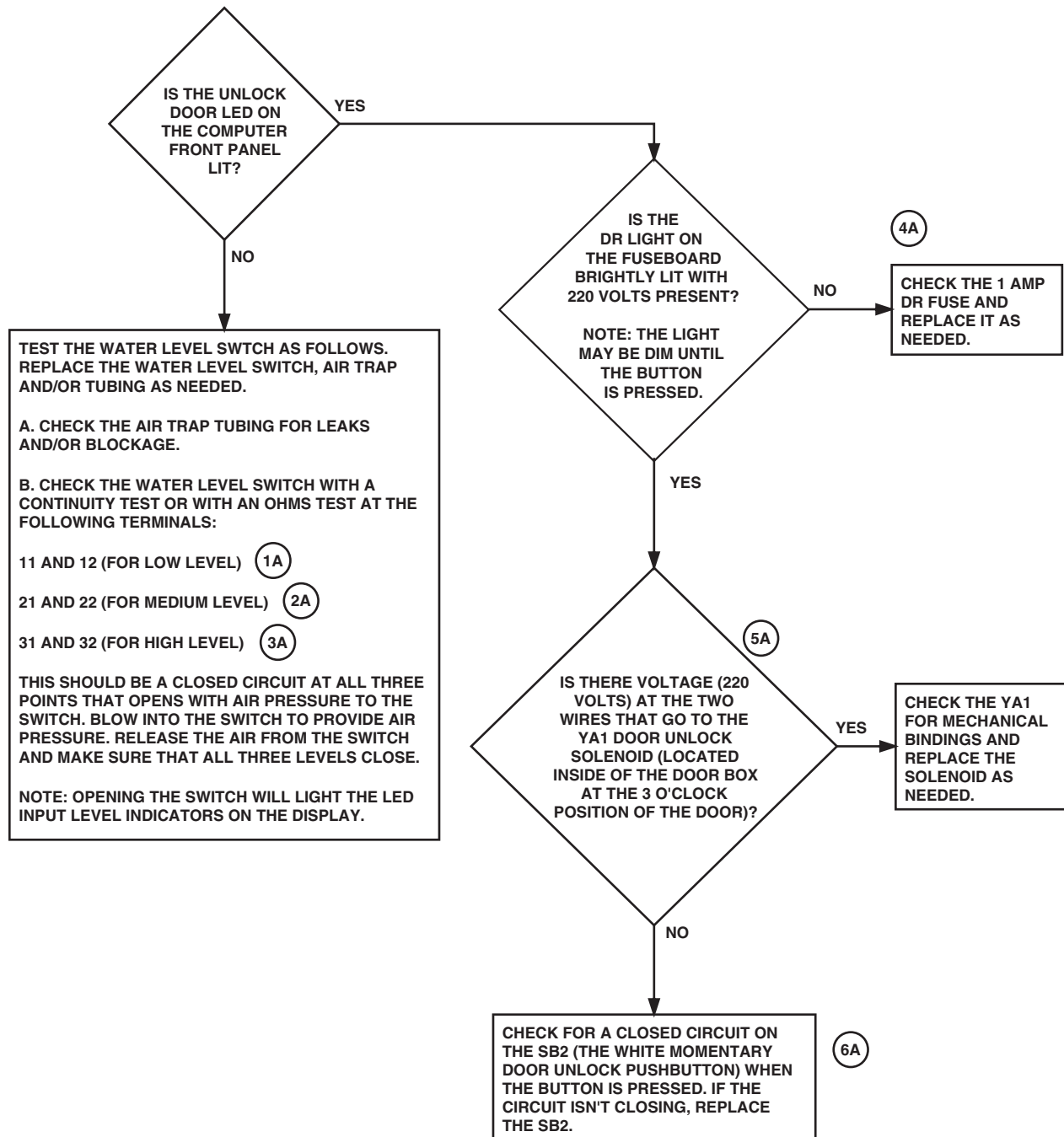
240V.
SEE FIGURE 1 FOR DETAILS.
CIRCUIT BREAKER (REFER TO NOTE 2).
ACTIVATE
WIRING ARRANGEMENT.
SPECIALLY ORDERED.

FIGURE 1



PHM2075S
604842M

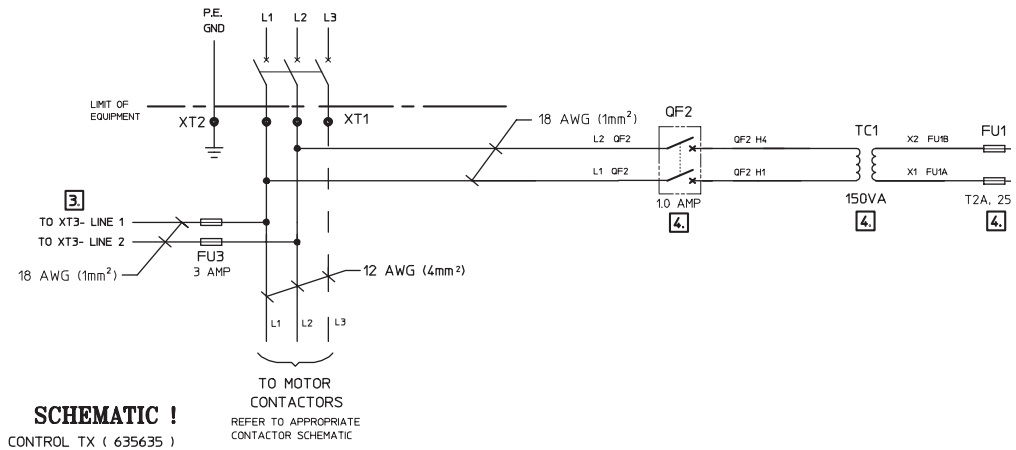
22. Door Unlocking Function (220 Volt Control)



PHM1933S

Please refer to the following 2 pages for wiring diagram information.

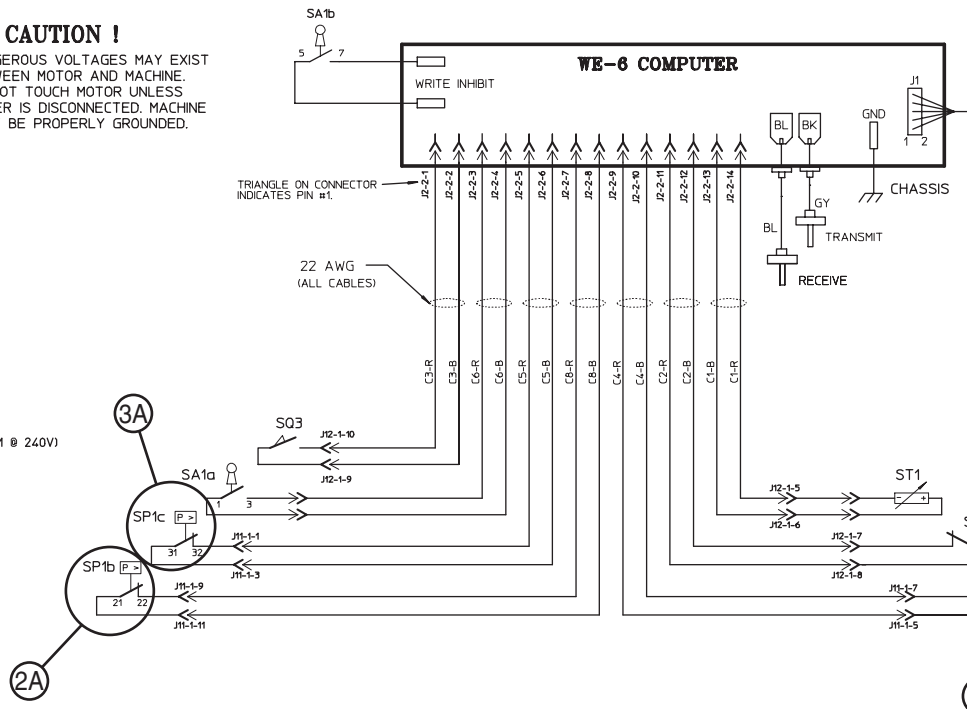
Door Unlocking Function (220 Volt Control) (Sheet 1 of 2)



CAUTION !
DANGEROUS VOLTAGES MAY EXIST BETWEEN MOTOR AND MACHINE. DO NOT TOUCH MOTOR UNLESS POWER IS DISCONNECTED. MACHINE MUST BE PROPERLY GROUNDED.

LEGEND

- OPTIONAL CONNECTIONS
- CONNECTIONS INTERNAL TO DEVICE
- FR1 - SWITCH, LOW-SPEED MOTOR OVER-TEMPERATURE
- FR2 - SWITCH, HIGH-SPEED MOTOR OVER-TEMPERATURE
- FU1 - FUSE, 2A SLO-BLO 5x20mm
- FU3 - FUSE, 3A FAST ACTING 5x20mm
- FU4 - FUSE, 125mA SLO-BLO 5x20mm
- HA1 - BUZZER, ACCOUSTICAL ALARM
- HL1 - LIGHT, MOTOR THERMAL OVERLOAD INDICATOR
- KA4 - RELAY, DOOR SAFETY (COIL & CONTACTS)
- KAS - RELAY, FIFTH SUPPLY (COIL & CONTACTS)
- KM2 - CONTACTOR, FORWARD ROTATION
- KM3 - CONTACTOR, REVERSE ROTATION
- KM4 - CONTACTOR, DISTRIBUTION SPEED
- KM7 - CONTACTOR, HIGH SPEED
- KM8 - CONTACTOR, ELECTRIC HEAT
- M3 - DRAIN VALVE, SEWER
- QF2 - CIRCUIT BREAKER, TRANSFORMER PRIMARY
- R1 - RESISTOR, SUPPLY RELAY (6K OHM @ 120V, 12K OHM @ 240V)
- SA1a,b - SWITCH, COMPUTER RUN/WRITE ENABLE
- SB1 - SWITCH, EMERGENCY STOP
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SB2 - SWITCH, DOOR UNLOCK (MOMENTARY)
- SP1a,b,c - SWITCH, LOW, MEDIUM & HIGH WATER LEVEL
- SQ1 - SWITCH, MAGNETIC DOOR CLOSED
- SQ2 - SWITCH, OUT-OF-BALANCE
- SQ3 - SWITCH, DOOR LOCKED
- ST1 - TEMPERATURE PROBE
- ST2 - RELAY, CURRENT OVERLOAD
- TC1 - TRANSFORMER, CONTROL (150VA or 250VA)
- XT1 - TERMINAL BLOCK, INPUT POWER
- XT2 - TERMINAL BLOCK, PROTECTIVE EARTH GROUND
- XT3 - TERMINAL BLOCK, EXTERNAL SUPPLY
- YA1 - SOLENOID, DOOR UNLOCK
- YV1 - VALVE, COLD FILL
- YV2 - VALVE, HOT FILL
- YV3 - VALVE, COLD SPRAY
- YV4 - VALVE, HOT SPRAY
- YV6 - VALVE, SUPPLY 1 FLUSH
- YV7 - VALVE, SUPPLY 2 FLUSH
- YV8 - VALVE, SUPPLY 3 FLUSH
- YV9 - VALVE, SUPPLY 4 FLUSH
- YV11 - VALVE, STEAM HEAT

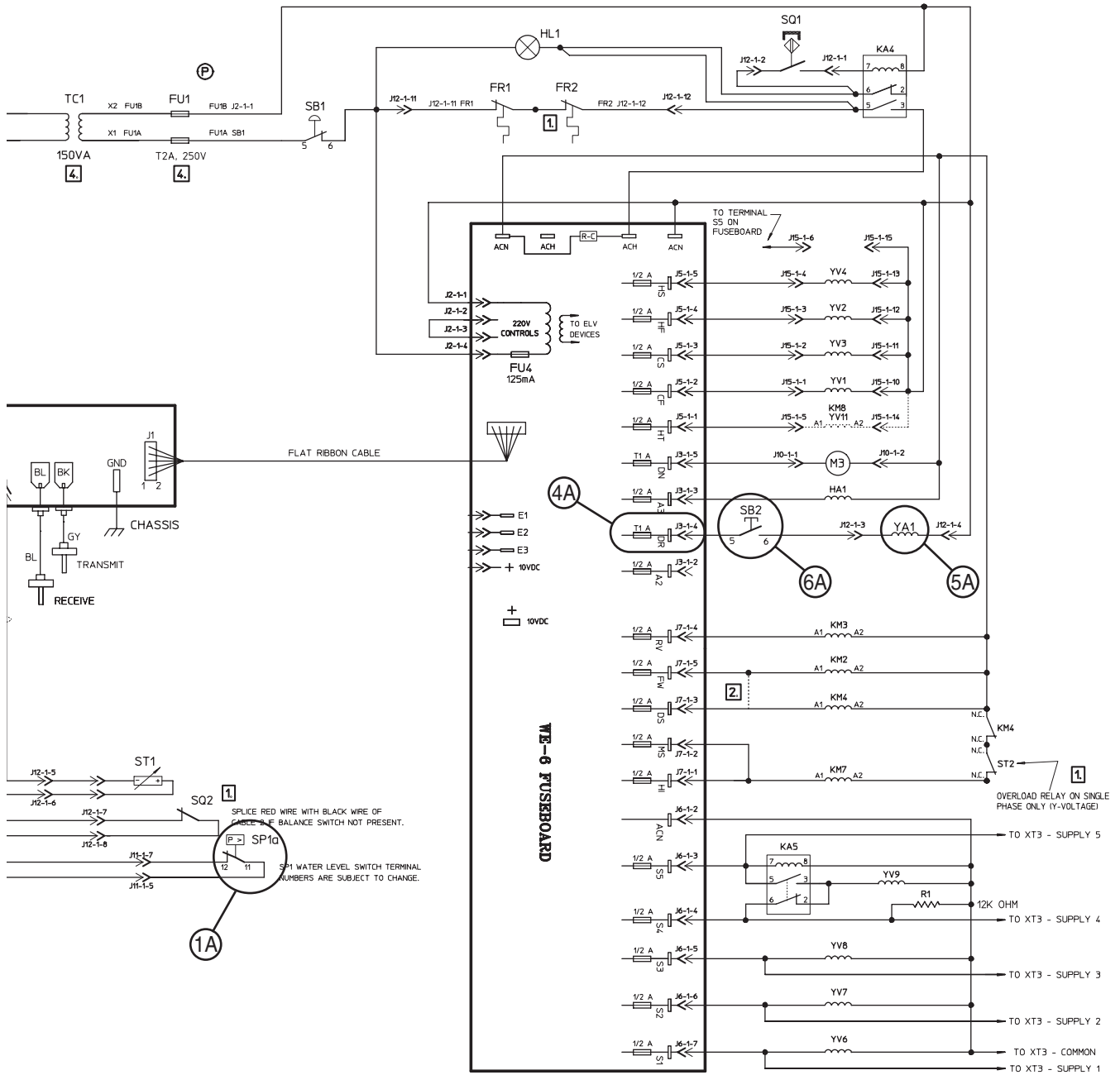


NOTES:

- 1 SQ2 (BALANCE) NOT USED ON UW35 2 OR 3 SPEEDS. FR2 (MOTOR THERMAL) NOT USED ON 2 SPEEDS. ST2 (OVERLOAD RELAY) USED ON Y-VOLTAGE ONLY.
- 2 CONNECT THE WIRE FROM 'DS' TO TERMINAL A1 OF KM2 (FWD), ALONG WITH 1 ON UW35 & 60 2 SPEEDS. OMIT CONTACTOR KM4 AND ASSOCIATED WIRE WHE
- 3 OMIT WIRES TO "XT3-LINE1", "XT3-LINE2" & FUSEHOLDER FU3 ON MACHINES W1
- 4 CONTROL TRANSFORMER (TC1) & PRIMARY C.B. (QF2) ARE NOT PRESENT ON 0 THE TWO FU1 FUSES CONNECT DIRECTLY TO L1 & L2 ON 0- & Y-VOLTAGE M. REFER TO DRAWING # 635635 FOR CONNECTION DETAILS OF CONTROL TRANS

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

Door Unlocking Function (220 Volt Control) (Sheet 2 of 2)



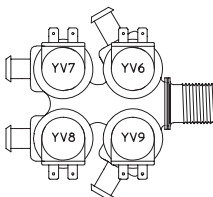
PEEDS.
3S.
ONLY.

V1 OF KM2 (FWD), ALONG WITH THE WIRE FROM "FW",
KM4 AND ASSOCIATED WIRE WHEN REWIRING OUTPUTS OF FUSEBOARD.

SEHOLDER FU3 ON MACHINES WITH INPUT VOLTAGES GREATER THAN 240V.

(QF2) ARE NOT PRESENT ON O- & Y-VOLTAGE MACHINES.
.1 & L2 ON O- & Y-VOLTAGE MACHINES.
IN DETAILS OF CONTROL TRANSFORMER.

4-WAY ELBI VALVE



PHM1970S
0604842 (P)

23. Excessive Cycle Time

When experiencing excessive cycle time, there are three main causes which are as follows:

a. **Fill Time:**

- (1) Check for excessively long fill times. Refer to the “Fill Alarm Analysis” flowchart if any are found.
- (2) Check for excessively long programmed fill times.

NOTE: All pre-programmed fill times are for 5 minutes. Any fill should easily complete during this time.

b. **Drain Time:**

- (1) Look for excessively long programmed drain times (i.e., greater than one minute).

NOTE: Any drain step should not exceed 30-40 seconds.

c. **Unnecessary Programming Steps:**

- (1) E.g., in the first fill of a cycle, if “S102XX” is programmed for 45 seconds and “S203XX” is programmed for 45 seconds, the two steps can be accomplished together at the same time, saving 45 seconds. Refer to the “Programming Multiple Supply Steps” section of your washer-extractor’s programming manual.

24. Excessive Vibration and/or Noise During Spin

When experiencing excessive vibration and/or noise during a spin cycle, there are three main causes, which are as follows:

a. **Improper Loading:**

- (1) Always make sure that full loads are used. Never wash partial loads.
- (2) Do not mix various laundry items together in the same wash (e.g., do not wash towels and sheets together).

b. **Improper Installation:**

- (1) Make sure that the washer-extractor is anchored to a flat, level surface with the proper depth of concrete.
- (2) Tighten all anchor bolts and nuts. Make sure that they are of the correct size and grade.
- (3) Make sure that the washer-extractor is grouted properly.
- (4) Refer to your washer-extractor’s installation manual for exact installation specifications.

c. **Faulty Front and/or Rear Bearings:**

- (1) Check the front and rear bearings’ noise factor.
- (2) Lift up on the basket at the front of the tub. Check for any up and down play that would indicate bearing wear.
- (3) Replace the bearings as needed.

25. Stop/Done Situation in Mid Cycle

If the washer-extractor stops in mid-cycle, this indicates that the computer saw an open circuit at the door lock microswitch.

Check the door lock microswitch for loose connections or broken wires. Repair the wires or replace the microswitch as needed.

26. Power Wait Situation in Mid Cycle

A power wait situation in mid cycle indicates that the machine's computer lost power.

- a. Check the computer's battery back-up. Replace the battery as needed.
- b. If the battery is okay, check for voltage at the white plug by the transformer on the output board. Voltage present should either be 120 or 220 VAC, depending on the control voltage.

27. Pumps Turning on in Mid Cycle Without Being Programmed to Do So

Pumps turning on in mid-cycle without being programmed to do so may be the result of resistors on the output board allowing low voltage leaks (between 1 and 40 VAC).

Replace the resistors on the output board (that correspond to the pumps that are turning on in mid cycle) as needed.

Also, verify that the supply valve is connected. Removal of a valve from a circuit will result in a feedback voltage that can trigger the pumps to turn on.

