

SERVICE MANUAL

October 2007

UNDERCOUNTER & ALL PURPOSE DISHWASHERS



Models: FI – 48 W
FI – 64 W
FI – 72 W



0 TABLE OF CONTENTS

0	TABLE OF CONTENTS	1
1	QUICK START GUIDE	1
2	QUICK INSTALLATION	2
3	SPECIFICATIONS	3
3.1	MODEL: FI-48 W	3
3.2	MODEL: FI-64W	4
3.3	MODEL: FI-72W	5
4	INSTALLATION	6
4.1	VISUAL INSPECTION	6
4.2	INSTALLATION DIAGRAMS	6
4.3	DATA PLATE	7
4.4	POSITIONING	7
4.5	WATER INSTALLATION	8
4.6	WATER DRAINAGE	9
4.7	ELECTRICAL CONNECTION	9
5	INSTALLATION CHECKLIST	12
6	OPERATIONS	13
6.1	WASHING	13
6.2	DRAINING AND CLEANING	14
6.3	DETERGENT CONTROL	15
6.4	PREPARING THE WARE	16
6.5	DELIMING	16
7	TROUBLESHOOTING	17
8	ELECTRICAL DIAGRAMS	20
9	WIRING SCHEMATICS	23
10	ELECTRICAL DIAGRAMS (MACHINES BEFORE MAY 2006)	29
11	SCHEMATICS (MACHINES BEFORE MAY 2006)	31
12	SEQUENCE FLOW CHARTS (MACHINES BEFORE MAY2006)	33
12.1	TIMER WIRING SCHEMATIC	33
12.2	START SWITCH	33
12.3	THERMO-STOP (HOT WATER ASSURANCE)	35

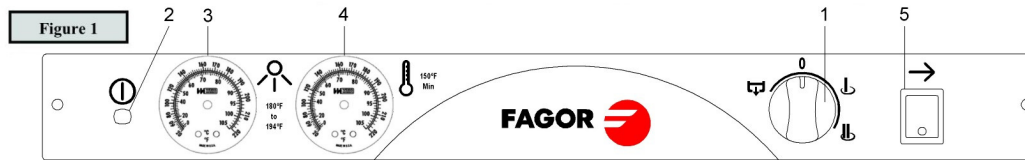
12.4	SELECTOR SWITCH (IG)	35
12.5	SAFETY PRESSURE SWITCH	35
13	SERVICE PROCEDURES	38
13.1	TANK THERMOSTAT	38
13.2	WATER VALVE	38
13.3	BOILER THERMOSTAT	39
13.4	TIMER	39
13.5	START BUTTON	40
14	DETERGENT PUMP NEW LOCATION	41
15	PROCEDURE TO INSTALL EXTERNAL CHEMICAL PUMP	42
16	THERMOSTAT CONFIGURATIONS (AFTER OCTOBER 2006)	43
17	RECOMMENDED SPARE PARTS	45
18	WARRANTY GUIDELINES	46

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read this manual thoroughly before installing or servicing this equipment. We recommend all service performed by an authorized service technician. Follow the instructions and guidelines to ensure that your warranty remains in effect.



Quick Start Guide

FI-48W / FI-64W / FI-72W



Operations

Fill & Warm up

1. Turn the selector switch (1) to desired time setting.
2. Wait for the machine to reach operating conditions. Rinse gauge (3) should read minimum 180° F (83°C) and tank gauge (4) should read minimum 150° F (66°C).

Washing

1. Pre scrap all ware thoroughly prior to placing in your Dishwasher.
2. Open the door, load the dishwasher, close the door.
3. Depress the start button (5) which illuminates during the wash cycle.
4. Repeat process when completed.

Notes:

To speed up the warm up process, you can run the Dishwasher a couple of times only after the Rinse Gauge (3) is at least 180° F (83°C).

If you start your dishwasher prior to your booster heater (3) reaching a minimum of 180° F (83°C), YOU WILL HAVE AN EXTENDED WASH CYCLE.


Chemicals

- Built-in Adjustable Detergent and Rinse Dispensers are Standard (Refer to your Operations Manual for Pump Priming and Adjustment instructions)

DETERGENT MUST BE COMMERCIAL GRADE, HIGH TEMPERATURE, LOW SUDS, LIQUID DETERGENT.

Draining & Cleaning

Draining

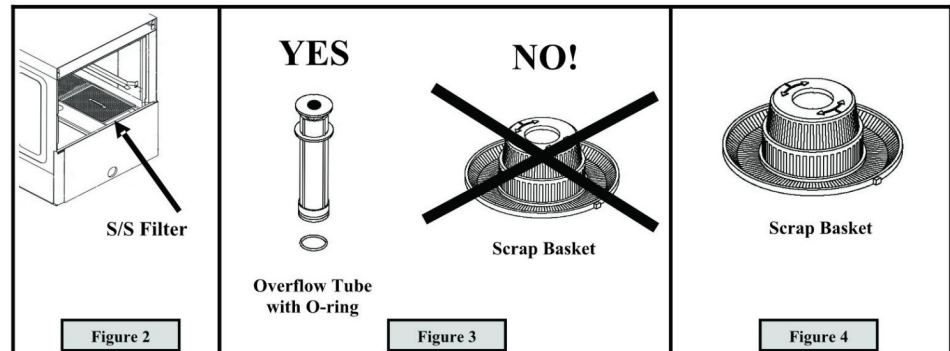
1. Switch selector switch (1) to the 0 setting. (OFF) (Fig. 1)
2. Open door, remove Front Right S/S Filter (Fig. 2), and overflow tube (Fig. 3).
DO NOT REMOVE SCRAP BASKET or LOOSE O-RING!
3. Close door, set selector switch (1) to  for draining. (Fig. 1)
4. Depress the start button (5) which illuminates during drain cycle. (Fig. 1)
5. FI-72W will drain via Gravity - Omit steps 3 & 4.
6. Switch selector switch (1) back to the OFF position. (Fig. 1)

Cleaning

1. Open door, remove scrap basket (Fig. 4) and all S/S Filters for cleaning.
2. Replace Scrap Basket, Overflow Tube with O-Ring, and all S/S Filters.
3. Wipe clean and dry the machine. Leave door open until the next day operations.

Deliming

1. Place Deliming agent in tank and run cycles as needed.
(Refer to Operations Manual for detailed instructions)





Quick Installation Guide

LVC-21W / FI-48W / FI-64W / FI-72W

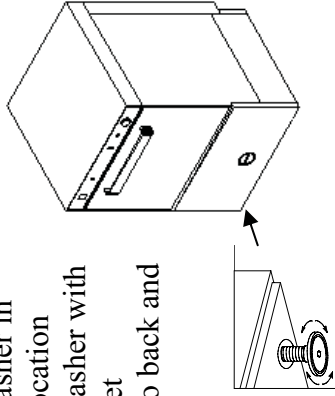
All Plumbing and Electrical Connections must be made by a qualified installer in accordance with your state and local codes!

First



Level Dishwasher

- Place Dishwasher in permanent location
- Level Dishwasher with 4 leveling feet
- Level front to back and side to side

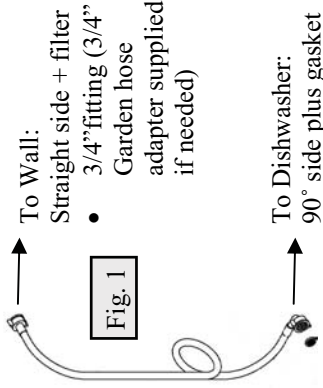


Second



Hot Water Connection

- Min. 140° F (60° C) @ 20 psi flow pressure
- Use 5' flexible water supplied hose (Fig. 1)
- Install filter and gasket supplied

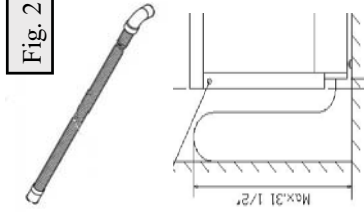


Third



Drain Hook Up

- Open Drain required
- 1-1/2" minimum I.P.S.
- Use grey flex drain supplied (Fig. 2). Clamp it, so remains in place.
- Max. Drain Height
LVC-21W - 26-3/4"
FI-48/64W - 31-1/2"
FI-72W - 10"

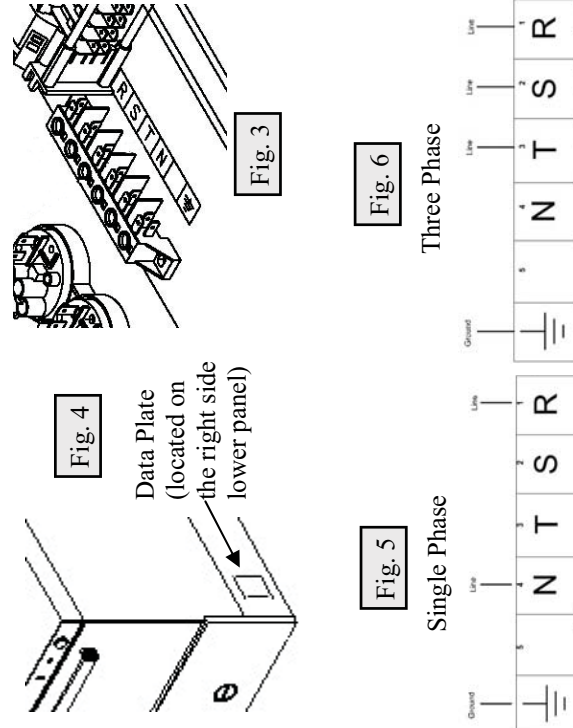


Fourth



Electrical Connection

- Remove Top and back panel to access to terminal block (Fig. 3)
- Check Data Plate (Fig. 4) to verify Voltage and Phase.
- Verify Terminal Block Connection. Single Phase (Fig. 5). Three Phase (Fig.6)
- When power cord is supplied, verify the connection has not be loosen upon shipment.
- Check Amps Consumption on Data Plate to size breaker correctly.
- Replace the back and top panel. Careful not pull out any wires.
- Write the Model and Serial number in the manual and keep in a safe place.

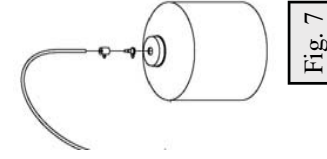


Fifth



Chemicals

- Dishwasher comes standard with built-in **Adjustable** Detergent and Rinse Pumps
- On the back of the Dishwasher, locate clear tube marked as “Detergent” and place inside detergent container. (Fig. 7)
- The unmarked clear tube is to be placed inside your rinse container. (Fig. 7)
- Contact Fagor to install an External Chemical Pump



**Use Commercial Grade,
High Temperature, Low Suds
Liquid Detergent!**

Run Machine to verify that all electrical, water and drain hookups are correct, chemicals amount are adequate and there are no leaks!

3 SPECIFICATIONS

3.1 MODEL: FI-48 W

PERFORMANCE/CAPACITIES

Capacities

Racks per hr.: 22
Dishes per hr.: 550
Glasses per hr: 792
Tank: 6.6gal. / 24.9 liters

Water Consumption / Requirements

Gallons per hr. (Max. use): 27gal. / 102 liters
Gallons per cycles: .9 gal. / 3.4 liters
Inlet temperature: 140°F
Flow rinse pressure: 15-25 psi

Wash Pump Motor

Motor (hp): 1 hp

Temperatures

Wash: 150°F / 66°C
Rinse: 190°F / 88°C

Heating Elements

Electric wash tank heater: 2.8 Kw
Electric booster heater: 2.8 Kw

Operating Cycles

Wash time (Seconds): 2 settings (100,160)
Dwell (Seconds): 5
Rinse time (Seconds): 15
Total Time (Seconds): 2 settings (120,180)

Dimensions / Shipping

Width: 24 1/4" / 616 mm
Depth: 27 1/2" / 698 mm
Height: 38 1/2" / 978 mm
Max clearance for dishware: 12 1/2" / 318mm
Rack: 20" x 20" / 500mm x 500mm
Shipping weight: 160 lbs. / 73 kg
Shipping volume (cu. ft.): 15

TECHNICAL SPECIFICATIONS

Total Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	14.9	3.1
220/60/1	15.9	3.5
240/60/1	17.0	4.1

Boiler Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	12	2.5
220/60/1	12.7	2.8
240/60/1	13.75	3.3

Pump Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	2.4	.5
220/60/1	2.7	.6
240/60/1	2.9	.7

3.2 MODEL: FI-64W

PERFORMANCE/CAPACITIES

Capacities

Racks per hr.: 35
Dishes per hr.: 875
Glasses per hr.: 1260
Wash Tank: 6.6gal. / 24.9 liters

Water Consumption

Gallons per hr. (Max. use): 36 gal. / 139 liters
Gallons per cycles: .9 gal. / 3.4 liters
Inlet temperature: 140°F
Flow rinse pressure: 15-25 psi

Wash Pump Motor

Motor (hp): 1 hp

Temperatures

Wash: 150°F / 66°C
Rinse: 190°F / 88°C

Heating Elements

Electric wash tank heater: 2.8 Kw
Electric booster heater: 6 Kw

Operating Cycles

Wash time (Seconds): 2 settings (70,160)
Dwell (Seconds): 5
Rinse time (Seconds): 15
Total Time (Seconds): 2 settings (90,180)

Dimensions / Shipping

Width: 24 1/4" / 616 mm
Depth: 27 1/2" / 698 mm
Height: 38 1/2" / 978 mm
Max clearance for dishware: 12 1/2" / 318mm
Rack: 20" x 20" / 500mm x 500mm
Shipping weight: 160 lbs. / 73 kg
Shipping volume (cu. ft.): 15

TECHNICAL SPECIFICATIONS

Total Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/3	16.6	6.0
220/60/3	17.6	6.7
240/60/3	19.0	7.9

Pump Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/3	1.3	.5
220/60/3	1.6	.6
240/60/3	1.7	.7

Boiler Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/3	15.0	5.4
220/60/3	15.7	6.0
240/60/3	17.1	7.1

Total Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	28.8	6.0
220/60/1	30.4	6.7
240/60/1	32.9	7.9

Pump Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	2.4	.5
220/60/1	2.7	.6
240/60/1	2.9	.7

Boiler Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	25.9	5.4
220/60/1	27.2	6.0
240/60/1	29.5	7.1

3.3 MODEL: FI-72W

PERFORMANCE/CAPACITIES

Capacities

Racks per hr.: 35
Trays (Dishes) / per hr.: 280 (875)
Glasses per hr.: 1260
Wash Tank: 6.6gal. / 24.9 liters

Water Consumption

Gallons per hr. (Max. use): 36 gal. / 139 liters
Gallons per cycles: .9 gal. / 3.4 liters
Inlet temperature: 140°F
Flow rinse pressure: 15-25 psi

Wash Pump Motor

Motor (hp): 1 hp

Temperatures

Wash: 150°F / 66°C
Rinse: 190°F / 88°C

Heating Elements

Electric wash tank heater: 2.8 Kw
Electric booster heater: 6 Kw

Operating Cycles

Wash time (Seconds): 2 settings (70,160)
Dwell (Seconds): 5
Rinse time (Seconds): 15
Total Time (Seconds): 2 settings (90,180)

Dimensions / Shipping

Width: 24 1/4" / 616 mm
Depth: 27 1/2" / 698 mm
Height: 52" / 1320 mm
Max clearance for dishware: 16 1/2" / 420mm
Rack: 20" x 20" / 500mm x 500mm
Shipping weight: 180 lbs. / 82 kg
Shipping volume (cu. ft.): 20

TECHNICAL SPECIFICATIONS

Total Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/3	16.6	6.0
220/60/3	17.6	6.7
240/60/3	19.0	7.9

Pump Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/3	1.3	.5
220/60/3	1.6	.6
240/60/3	1.7	.7

Boiler Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/3	15.0	5.4
220/60/3	15.7	6.0
240/60/3	17.1	7.1

Total Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	28.8	6.0
220/60/1	30.4	6.7
240/60/1	32.9	7.9

Pump Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	2.4	.5
220/60/1	2.7	.6
240/60/1	2.9	.7

Boiler Power Consumption

Volts/hz/ph.	Amps	Power (KW)
208/60/1	25.9	5.4
220/60/1	27.2	6.0
240/60/1	29.5	7.1

4 INSTALLATION

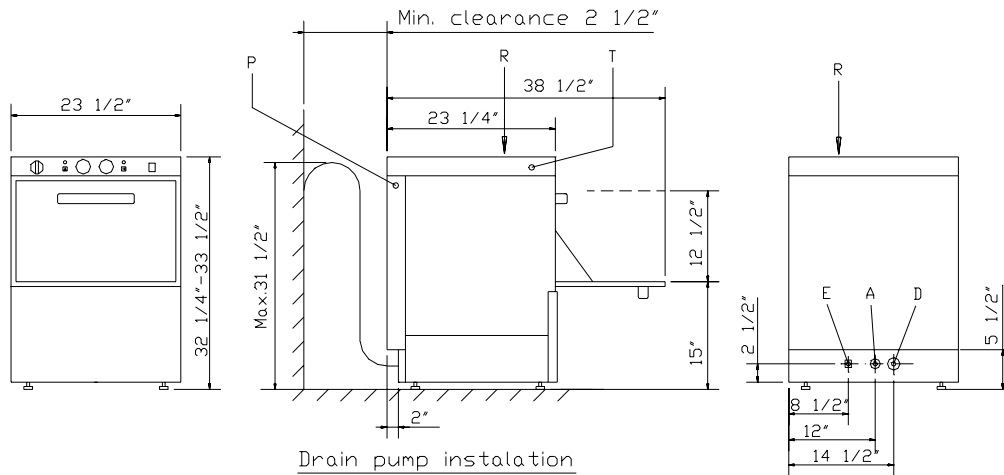
4.1 VISUAL INSPECTION

Upon receiving your new Fagor dishwasher, check the package and the machine for any damages that may have occurred during transportation. Visually inspect the exterior of the package. If damaged, open and inspect the contents with the carrier. Any damage should be noted and reported on the delivering carrier's receipt.

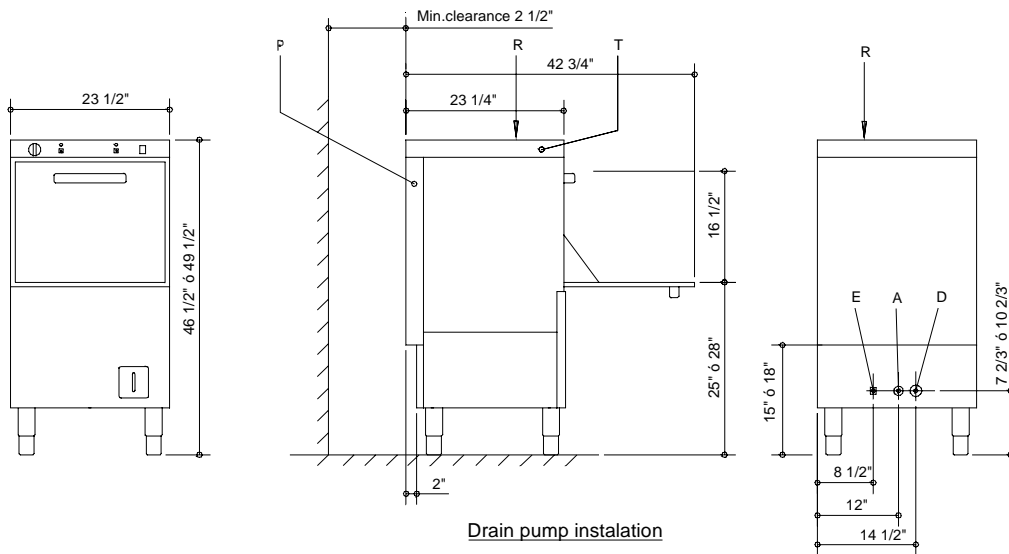
In the event that the exterior is not damaged, yet upon opening, there is concealed damage to the equipment notify the carrier immediately. Notification should be made verbally as well as in written form. Request an inspection by the shipping company of the damaged equipment. Also, contact the dealer through which you purchased the unit.

4.2 INSTALLATION DIAGRAMS

FI-48W, FI-64W



FI-72W



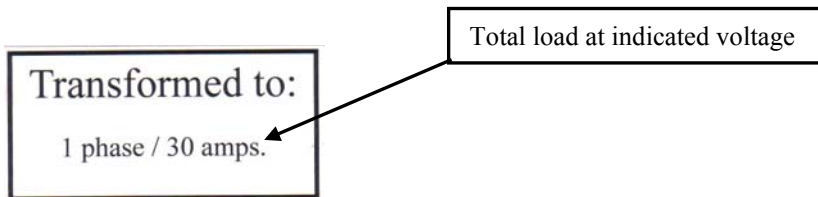
- A = Water inlet
- D = Drain hose
- E = Electrical Cable
- R = Terminal Block

Fig. 1

4.3 DATA PLATE

The data plate is located on one side of the machine. Under no circumstances should the data plate be removed from the unit. The data plate is essential to identify the particular features of your machine and is of great benefit to installers, operators and maintenance personnel. It is recommended that, in the event the data plate is removed, you copy down the essential information in this manual for reference before installation.

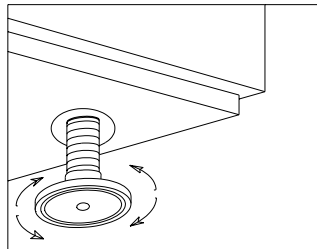
Any transformations or changes made on the machines during installation should be reflected on the data plate or using a label as below:



4.4 POSITIONING

Leveling and adjusting the height of the appliance is done by turning the leveling stands (Fig. 2) to the desired height. Ensure that the unit is level (front to back, side to side) before making any connections.

FI-48W
FI-64W



FI-72W

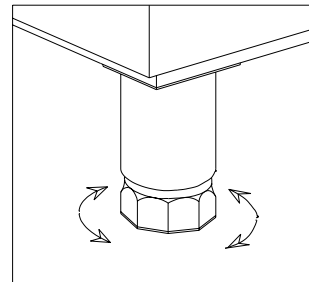
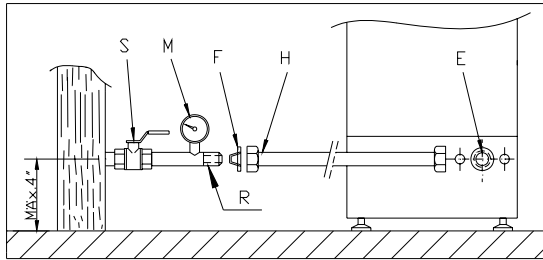


Fig. 2

4.5 WATER INSTALLATION

Water installation is carried out as shown in figures 3 and 4. The hot water line to the dishwasher must provide between 20^{±5} psi of water pressure. The hot water heater should be set to deliver ≥140°F water temperature to the dishwasher for best results. Use 3/4" copper tubing inlet line.



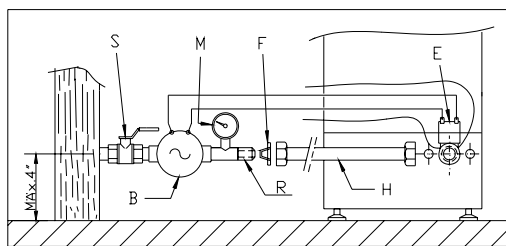
- S = Gate valve
- F = Filter
- H = Hose
- E = Fill valve
- M = Pressure gauge
- R = 3/4" Copper

Fig. 3

CAUTION: Do not confuse static pressure with flow pressure. Static pressure is the line pressure in a “no flow” condition (all valves and services are closed). Flow pressure is the pressure in the fill line when the solenoid valve is opened during the cycle

THE DISPLAY OF THE PRESSURE GAUGE SHALL BE CLEARLY VISIBLE OF THE OPERATOR OF THE MACHINE. THE GAUGE SHALL HAVE INCREMENTS OF 1 psi (7 kpa) OR SMALLER AND SHALL BE ACCURATE TO ±2 psi (±14 kpa) IN THE 15-25 psi (103-172 kpa) RANGE. IF THE GAUGE IS LOCATED UPSTREAM OF THE CONTROL VALVE, IT SHALL BE MOUNTED IN AN ACCESSIBLE VALVE WITH A 1/4 IN IRON PIPE SIZE CONNECTION.

If the water pressure is less than 20 psi (1.4 kg/cm²), installation of a water pump is required as shown in Fig. 4. In areas where the pressure fluctuates or is greater than the recommended pressure, it is suggested that a water pressure regulator be installed.



- S = Gate valve
- F = Filter
- H = Hose
- E = Fill valve
- B = Electro pump
- M = Pressure gauge
- R = 3/4" Copper

Fig. 4

It is necessary to remove all foreign debris from the water line that may potentially get trapped in the valves or cause an obstruction, prior to connecting to the machine.

Use only the supplied hoses (3/4" Female hose connector) at the water connections. Failure to do so may result in damage to the solenoid valve threads and leaking. Tighten by hand. Connect the bent side of the hose to the machine. Adaptor supplied for 3/4" female garden hose connection.

FOR HARD WATER SUPPLIES WITH A HARDNESS OF OVER 2 GRAINS OR 10°F AND PH BEYOND THE RANGE OF 7.0 – 8.5, A WATER CONDITIONER MUST BE INSTALLED.

Slowly turn on the water supply to the machine after the incoming fill line and the drain line have been installed. Check for any leaks and repair as required. All leaks must be repaired prior to placing the machine in operation.

4.6 WATER DRAINAGE

Attach the drain hose as shown in Fig. 5. It is recommended to affix a siphon pipe to prevent odors. All piping from the machine to the drain must be a minimum 1-1/2" I.P.S. There should also be an air gap between the machine drain line and the drain. For natural overflow efficiency use floor drain.

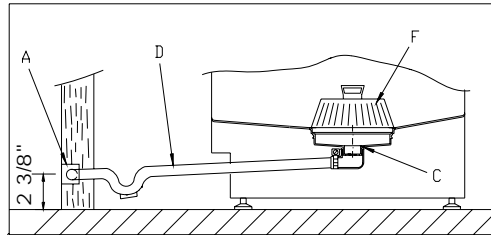


Fig. 5

D = Drain hose
C = Drain collector
A = Air Gap
F = Scrap Basket

4.7 ELECTRICAL CONNECTION

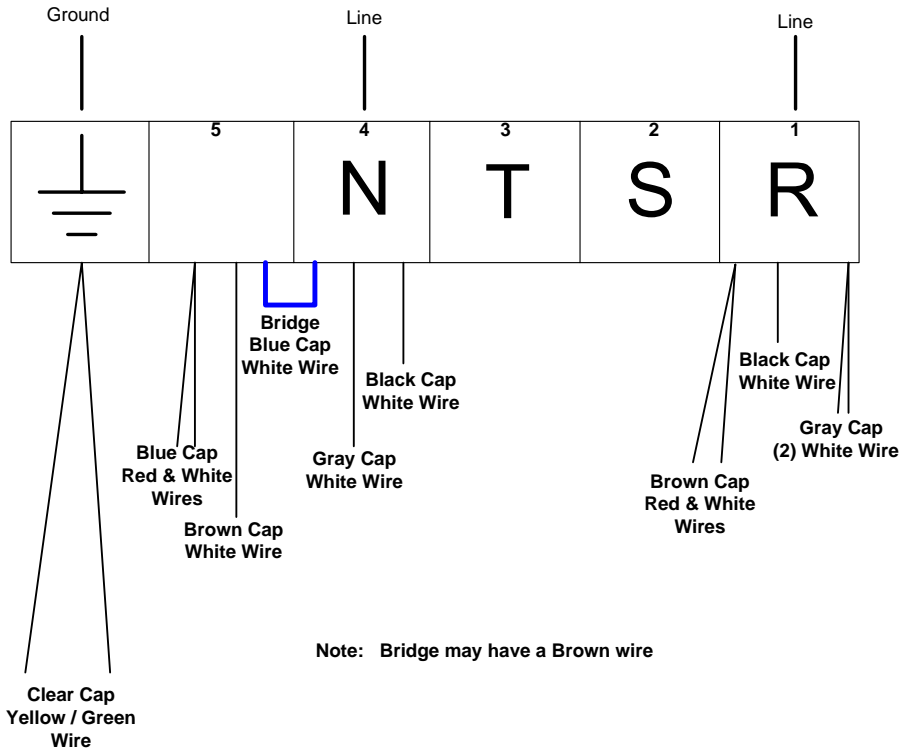
- To access to the electrical terminal block (R) (Fig. 1), remove the top cover (T) (Fig. 1) and the rear panel (P) (Fig. 1). Connect the wires as shown in figure 6. Insert the power cord through the cord holder (E) (Fig. 1) and make sure to leave enough cable to remove the electrical panel from the front for service. Tighten the connections.
- Leave free $\geq 39''$ (≥ 1000 mm) of power cord from the rear to facilitate cleaning of the location of the dishwasher.
- Install a circuit breaker in accordance to required consumption guidelines and data plate.
- The machine must be grounded.

WARNING: Electrical Shock Hazard

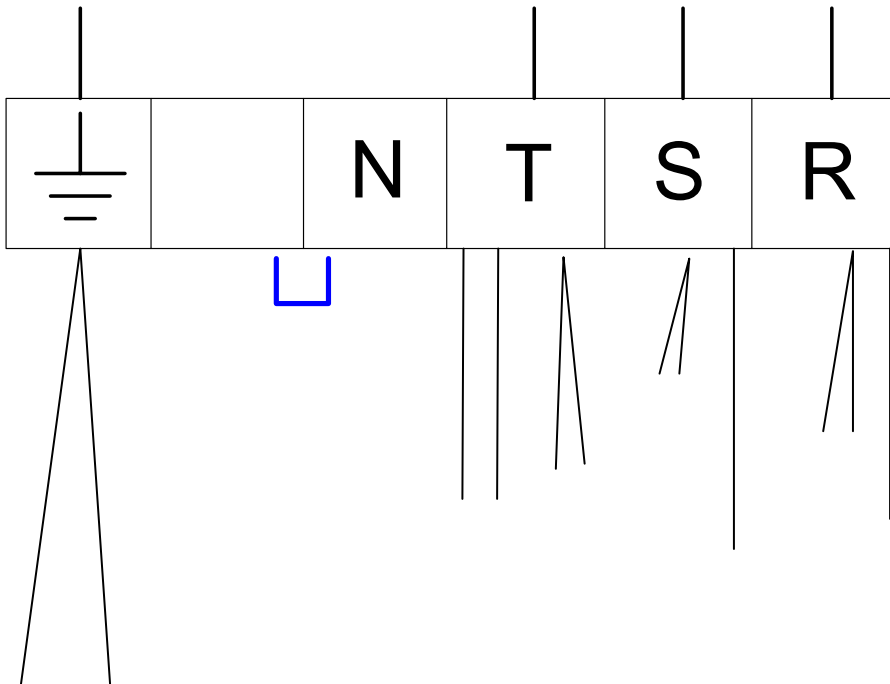
It is the personal responsibility and obligation of the customer to contact a qualified electrician to assure that the electrical installation is adequate and is in conformance with the National Electrical Code, ANSI / NFPA 70 – latest edition and all local codes and ordinance.

FI-64W / FI-72W

208-220 volts / 1 phase



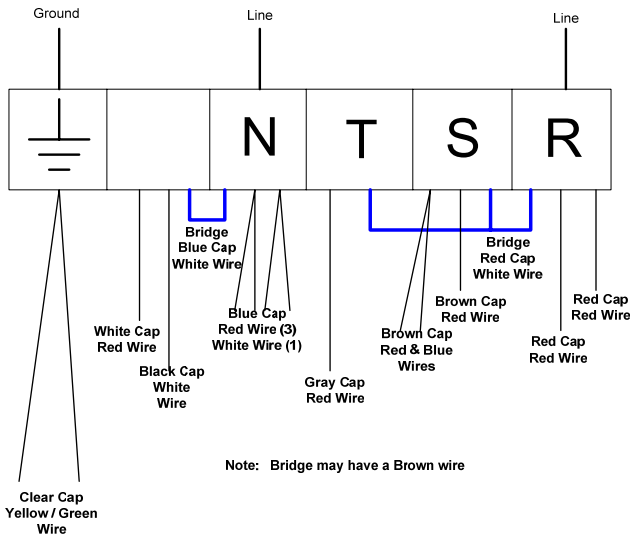
FI-64W / FI-72W



Other wiring configurations used BEFORE May 2006:

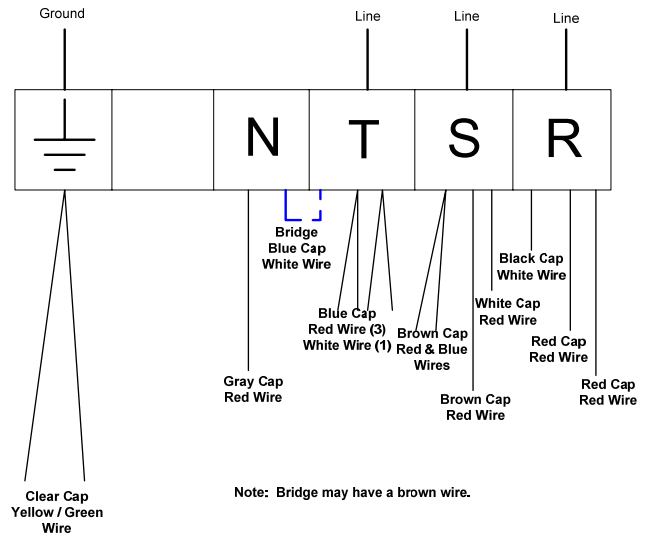
FI-64W / FI-72W

208-220 volts / 1 phase



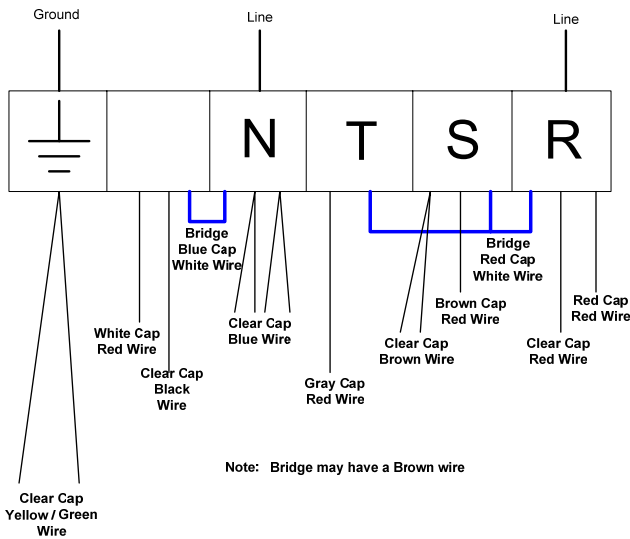
FI-64W / FI-72W

208-220-240 volts / 3 phase



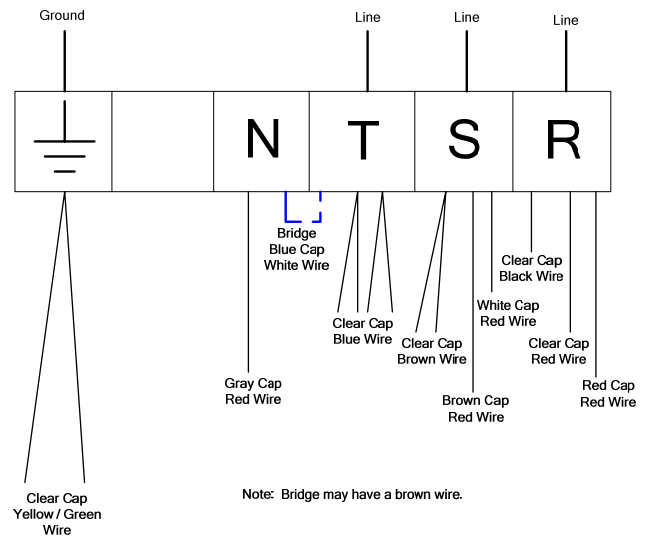
FI-64W / FI-72W

208-220 volts / 1 phase



FI-64W / FI-72W

208-220-240 volts / 3 phase



5 INSTALLATION CHECKLIST

CHECK OFF THE FOLLOWING ITEMS AS THEY ARE COMPLETED BEFORE PROCEEDING TO OPERATE OR SERVICE THE DISHWASHER.

- Has the dishwasher been checked for concealed/hidden damage?
- Has the dishwasher been properly leveled?
- Has the service voltage been checked to ensure that it meets the requirements listed on the dishwasher data plate?
- Has the dishwasher circuit breaker/service breaker been sized correctly, given the dishwasher's amperage requirements?
- Has the dishwasher been properly grounded?
- Are the electrical connections and pipes tighten and remain in place?
- Is the water valve open?
- Is the incoming water supply at 15 - 25 psi?
- Has been installed with the supplied water hose?
- Is the water hose not kinked?
- Has the incoming water supply been flushed for debris?
- Is the hot water supply at the optimum temperature (140°F)?
- Is the water hardness ≤ 2.0 gpg/34.2ppm and PH level 7 - 8.5ph ?
- Has the drain plumbing been installed according to the instructions in this manual?
- Is the drain hose not kinked?
- Is the overflow tube with the O-ring fitted in its position inside the tank
- Is the detergent for commercial dishwashers?
- Have you adjusted the amount of detergent / rinse going to the machine?

MODEL NO. _____
SERIAL NO. _____
INSTALLATION DATE _____
SERVICE REP. NAME _____
PHONE N° _____

6 OPERATIONS

6.1 WASHING

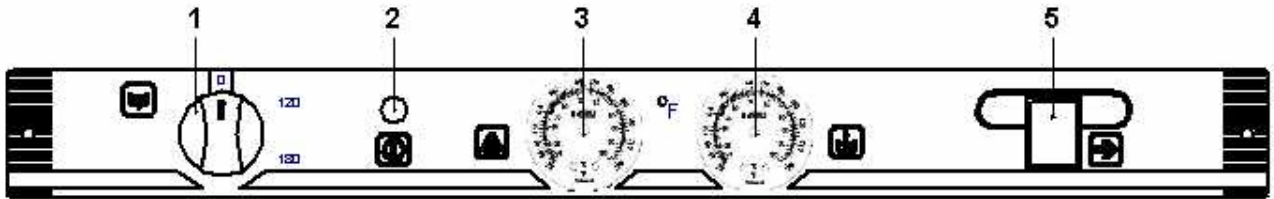


Fig. 7 Control Panel

- Set selector switch (1) to desired time setting. (FI-48W, 120 or 180 Second / FI-64W & FI-72W, 90 or 180 Second) This will turn your machine ON. Indicator light (2) will illuminate. Machine will automatically begin to fill and heat the water in the boiler and tank to the proper temperatures.
- Wait for the rinse gauge (3) to read $\geq 180^{\circ}\text{F}$ (83°C) and your wash tank gauge (4) to read $\geq 150^{\circ}\text{F}$ (66°C). (Time will vary depending on incoming water temperature)

Note: To speed up the warm up process, you can run the Dishwasher a couple of times only after the Rinse Gauge (3) is $\geq 180^{\circ}\text{F}$ (83°C).

- Open the door, load your dishwasher and close the door.
- Start the wash by pressing and holding your start button (5) until your machine begins to wash. Start switch (5) will illuminate during operation.
- Wash is completed when the start button (5) turns off.
- Open the door and repeat process.

If you start your dishwasher prior to your booster heater (3) reaching a minimum of 180°F (83°C), YOU WILL HAVE AN EXTENDED WASH CYCLE!

6.2 DRAINING AND CLEANING

**Draining must occur EVERY DAY and if in a high application;
It should be drained after each meal rush!**

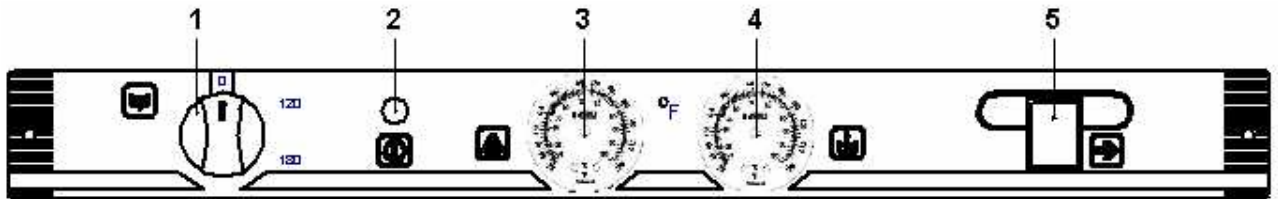

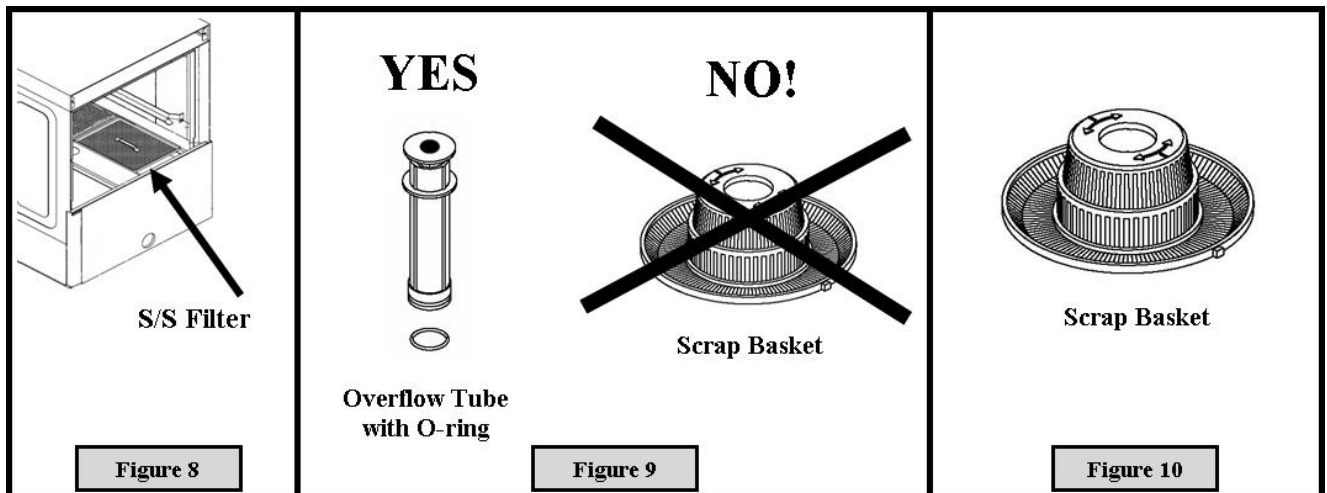


Fig. 7 Control Panel

- Switch selector switch (1) to the 0 setting. (OFF) (Fig. 7)
- Open the door and remove the Front Right S/S Filter. (Fig. 8)
- Remove the overflow tube by inserting a finger into the top of the tube. (Fig. 9)
DO NOT REMOVE SCRAP BASKET! DO NOT LOOSE O’RING!
- Close the door.
- Set selector switch (1) to  for drain. (Not shown of FI-72W, it will drain when you pull the overflow tube)
- Depress the Start Button (5) to start the drain pump. Start Button (5) will illuminate. (FI-48W / FI-64W only)
- Wait until the Start Button (5) turns off. (3 minutes)
- Open door.
- Take out scrap basket for cleaning by twisting to the left. (Fig. 10)
- Replace scrap basket, lock into position by twisting to the right and replace overflow tube with O-ring.
- Replace S/S filter back into position. (Fig. 8)
- Switch selector switch (1) back to the OFF position.
- Wipe clean and dry the machine if the day is completed. Leave door open until the next day’s operations or to one of the time settings to begin using the machine again.



6.3 DETERGENT CONTROL

- Use **Commercial Grade, High Temperature, Low Suds Liquid Detergent**. Fagor doesn't recommend any specific brand name of chemicals. Contact your local chemical distributor for questions concerning your chemical needs.
- All machines come equipped with an internal Detergent and Rinse dispenser.
- Take the tube located in the back of your machine clearly marked "Detergent" and place inside detergent container.
- Take the tube with no markings and place inside rinse container.
- Tubes are clear to provide you a visible means that chemicals are being dispensed.
- If desired you can control the amount of Chemical being dispensed by opening the bottom front panel of the machine. Locate the detergent dispenser (Fig. 9) and regulate according to the flow chart (Fig. 9a). For the Rinse, turn the button counterclockwise to get more rinse aide and clockwise for less. You prime the line by pressing the button.
- **Verify all connections to the dispenser are hand tighten to prevent any leaks.**
- Control and maintain the level of detergent and rinse aid of the tanks. Keep pipe and filters submerged.

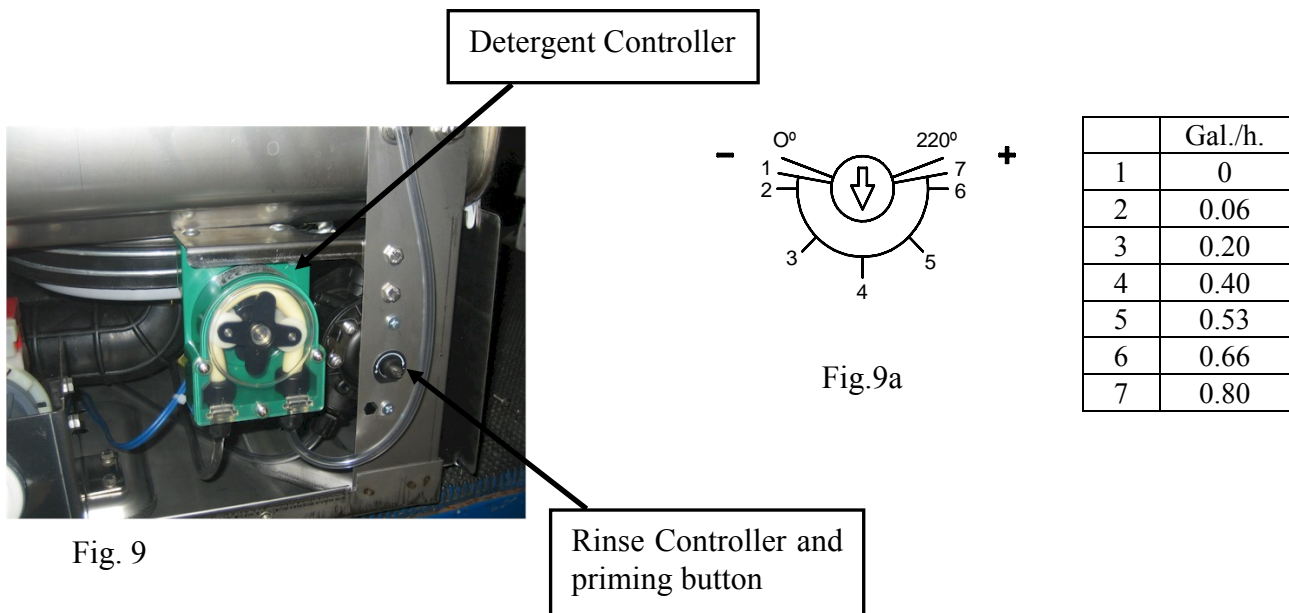


Fig. 9

Warning!

If you require the installation of a NON FAGOR Detergent and Rinse pump, a form MUST be filled out prior to installation by your installer. Failure to do so, will void your Warranty. This form can be located inside your dishwasher. If lost, please contact Fagor to get a copy.

6.4 PREPARING THE WARE

- Pre Rinse all racks prior to placing them in the dishwasher to remove large food particles from the ware.
- Wash glassware first
- Put trays in the baskets, making sure is in its separate rack (Fig.12).
- Put plates in the baskets, making sure each is in its separate rack (Fig. 11).
- Put glasses in upside down.
- Put cutlery in the cutlery baskets handles down. Mix spoons with knives and forks. (Fig. 10)
- Put the special cutlery baskets in the base baskets.

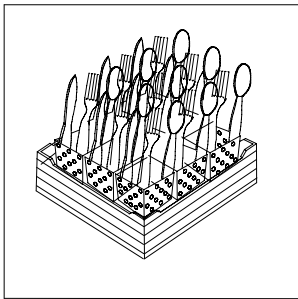


Fig. 10

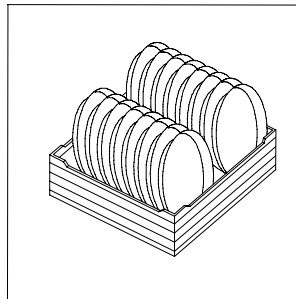


Fig. 11

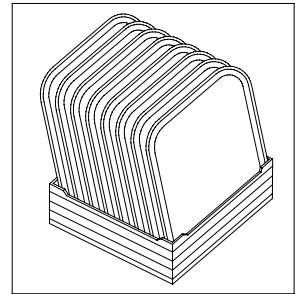


Fig.12

6.5 DELIMING

In order to maintain dishwasher at optimum conditions, it is requested to remove lime and corrosion deposits on a frequent basis. A deliming solution should be available from your chemical supplier. Read and follow all instructions on the label of the deliming solution. Operations:

- Fill the machine. Add the correct amount of deliming solutions as recommended by the deliming solution manufacturer. The water capacity of the tank can be verified on the specification sheet of this manual
- Remove detergent and rinsing tubes from containers so no chemicals go to the machine
- Run the machine for the recommended period of time. As many cycles as needed.
- Turn off the machine and open the door
- When clean, drain and re-fill the machine
- Run machine for 3-4 cycles to remove deliming solution
- Drain the machine.

7 TROUBLESHOOTING

First be sure that the “**INSTALLATION CHECKLIST**” in this manual was completed and check out that all the conditions still remains in effect. For support or further service information contact Fagor Service Department toll free at 1-866-GO-FAGOR (46-32467). The diagnosing, testing and repair of any electrical, mechanical device is to be performed solely by trained service technicians.

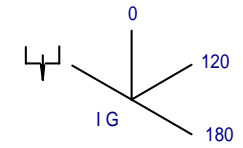
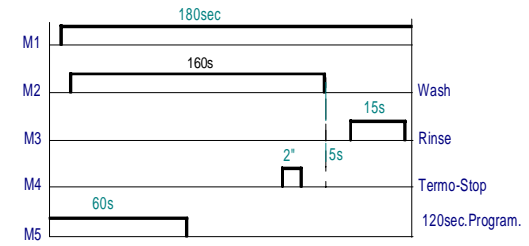
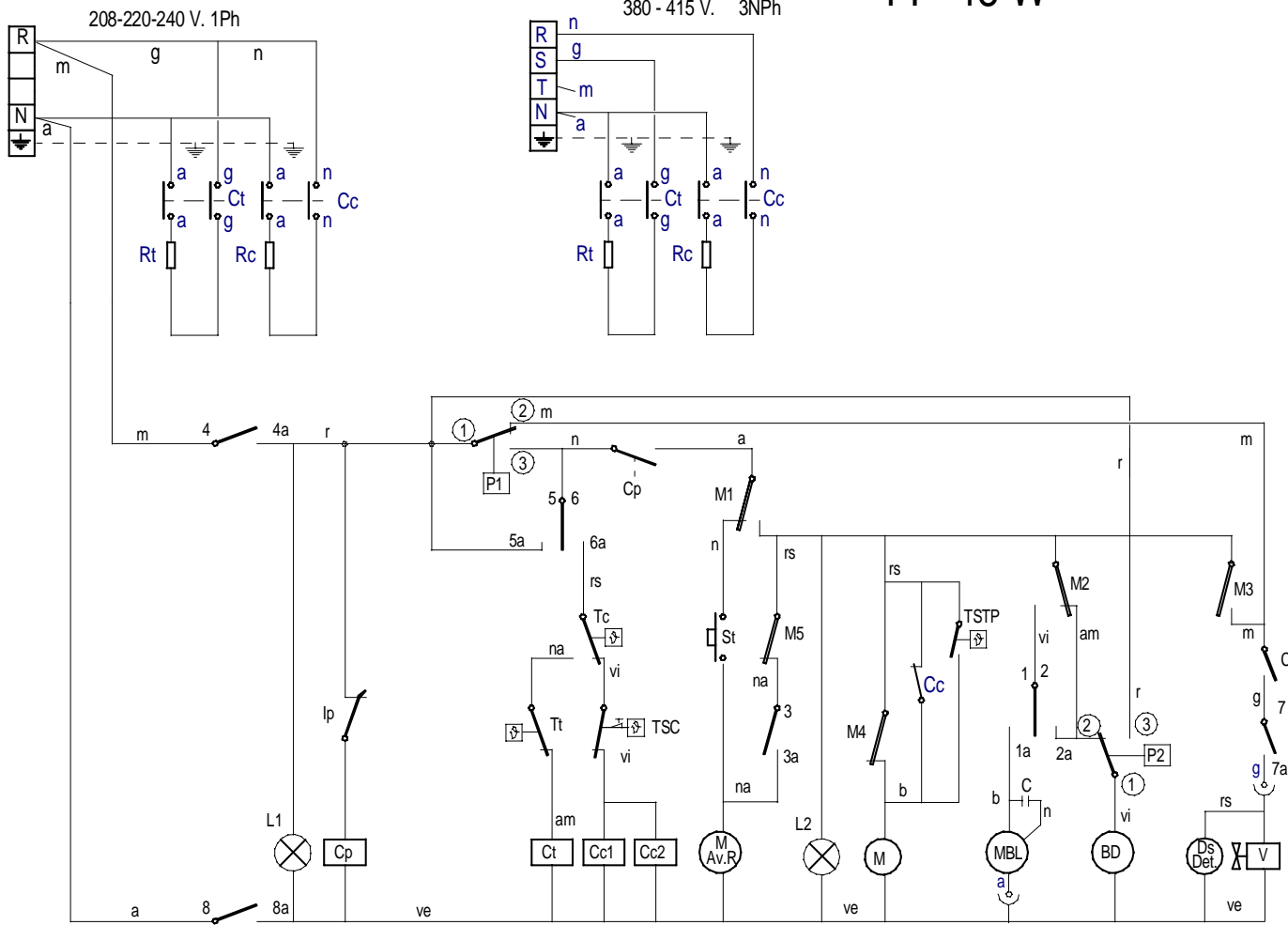
SYMPTOM	POSSIBLE CAUSE	ACTION
Dishwasher will NOT FILL after the door is closed. Power “ON” light (L1) is not illuminated.	Service breaker tripped	Reset. If the breaker trips again, contact an electrician to verify amps or possible short.
	Machine not connected to power source.	Verify the unit is connected to a hot (live) feed. Verify voltage and proper phasing.
	Faulty selector switch (Ig)	Verify the wiring of the switch; if correct, replace the switch. (Position 4-4a / 8-8a)
Dishwasher will NOT FILL after the door is closed. Power “ON” light (L1) is illuminated.	No water to machine	Verify hose is not blocked or kinked, water valve is open and pressure > 20 PSI.
	Machine not level	Level machine. Legs are height adjustable.
	Overflow tube not attached or broken / missing O-ring.	Check condition of overflow tube.
	Faulty door switch	Verify the wiring of the switch; if correct, replace the switch (Ip) or the door relay (Rp)
	Faulty fill pressure switch (P1)	Verify position change 1-2 / 1-3 to pressure switch. Possibly stuck .
	Faulty fill valve (V)	Verify the wiring and voltage received; if correct replace fill valve.
Dishwasher will NOT RUN after the door is closed. Power “ON” light (L1) is illuminated and the unit has completed the filling and heating cycle.	Fill pressure switch’s pipe clogged	Drain the unit, fill again, even manually and run a cycle
	Faulty fill pressure switch (P1)	Verify it changes position of the switch; If not replace it.
	Start button (St) faulty	Verify start button is operating properly. If not replace it.
	Faulty Timer (M)	Verify the timer is rotating (M1, M2 & M3). If not, check to see that the motor is receiving power. If so, replace the timer assembly. Ohm out timer motor leads.
	Faulty wash pump (MBL)	Verify that the wash pump is getting power. If so, replace the pump. Ohm out windings.
	Selector switch faulty (IG)	Verify voltage at (1,2 to1a) at selector switch
Dishwasher RUNS continuously in the wash cycle or not rinsing.	Rinsing temperature gauge is lower than 195°F.	Wait until sanitized rinsing temperature is reached (195°F). Check out your incoming water temperature.
<i>(Continue next page)</i>		

SYMPTOM	POSSIBLE CAUSE	ACTION
Dishwasher RUNS continuously in the wash cycle or not rinsing.	Timer faulty (M)	Verify the programmer is rotating (M1, M2, M3, and M4 & M5). If not, check to see that the motor is receiving power. If so, replace the programmer assembly. Ohm out timer motor leads.
	Operating t-stat faulty (Tc)	Verify position change if temperature has been met. Opening circuit to tank relay and closing thermo relay.
	Faulty thermo relay (R)	Verify thermo-relay is not energized and (pk/pk) from m1 to timer run motor is closed
	Faulty rinse valve (V)	Verify the wiring and voltage received; if correct, ohm out. If open replace valve.
	No water to machine.	Verify hose is not blocked or kinked, water valve is open and pressure > 20 PSI.
Dishwasher FILLS slowly and/or rinse is weak.	Clogged or obstructed rinse arms	Remove and clean rinse arms/nozzles.
	Poor water pressure	Verify the inlet water pressure is at a min of 15 psi and max 25 psi.
	Hose strainer is clogged	Check strainer or any filters installed.
	Bad fill valve (V)	Valve can be clogged or lazy, causing poor flow.
Dishwasher RUNS. RINSE WATER NOT REACHING REQUIRED TEMPERATURE.	Temperature gauge in front panel is defective.	Check temperature with a calibrated thermometer. Replace temperature gauge if necessary.
	Misadjusted/faulty thermostat (Tc)	Verify operation and setting of thermostat; replace if necessary. If thermostat is not receiving voltage, check wiring or replace selector switch (IG)
	Faulty high limit stat (Tl)	Reset thermostat, depressing red button. Replace if necessary.
	Faulty heater relay (Cc)	Ohm out booster relay, closed when solenoid receiving voltage. If not replace.
	Rinse heater (Rc) faulty	Ohm out element check for continuity; if open, replace heater.
	Bad selector switch (IG)	Verify voltage between positions (6/6a) (Pk/r); replace if no voltage.
Dishwashing machine RUNS. WASH WATER NOT REACHING REQUIRED TEMPERATURE. (Continue next page)	Wrong incoming water and pressure going to the machine.	Check out that incoming water temperature and pressure are the optimums indicated on the data plate.
	Faulty operation t-stat (Tc)	Verify position change to tank t-stat (Tt); replace if necessary.
	Misadjusted/faulty thermostat (Tt)	Verify voltage to t-stat and position change from booster to tank.

SYMPTOM	POSSIBLE CAUSE	ACTION
Dishwashing machine RUNS. WASH WATER NOT REACHING REQUIRED TEMPERATURE.	Tank heater relay (Ct) faulty.	Verify contacts are close when there is voltage to relay also check for stuck or pitted contacts.
	Rinse heater (Rt) faulty	Check element for continuity; if open, replace heater.
Dishwasher RUNS perfectly but NOT DRAINING.	Overflow tube not removed.	Check and remove.
	Drain pump (BD) clogged.	Open drain pump cover and remove debris. (Lower front panel; unscrew white removable cover, rotate c/cw)
	Drain hose kinked	Make sure the drain hose is not kinked
	Drain pump (BD) faulty	Verify voltage to drain pump; if receiving voltage, ohm out drain pump if open, replace it.
	Faulty safety pressure switch (P2)	Verify position changes from (1-3 to-1-2)
Dishes are not coming out clean enough.	Machine temperatures or pressure may not be to specification.	Verify that the water pressure is at a min. of 20psi and max 60 psi. The water temperature should be at the recommended 140 F.
	None or too little detergent being used.	Make sure detergent to dish ratio is followed to manufacturer specification.
	Improper loading or overloading	Read chapter on proper loading of dishwasher.
	Washing and or rinsing arms jammed or dirty.	Check that arms rotate properly, and that rinsing and washing nozzles are not blocked or dirty. Clean if necessary
WATER OVERFLOW FROM BOTTOM OF THE DOOR	Clogged drain	Remove instruction form the pump or from the pipe
	Machine not level	Level machine. Increase height to the front
	Excessive inlet pressure	Install pressure reducing valve. Ensure flow is 15-25 PSI
	DETERGENT FOAMING	Use detergent for commercial appliances. Reduce detergent quantity

8 ELECTRICAL DIAGRAMS

FI - 48 W



IG	1 1a	2 2a	3 3a	4 4a	5 5a	6 6a	7 7a	8 8a
IG		X		X	X			X
0								
120	X		X	X		X	X	X
180	X			X		X	X	X

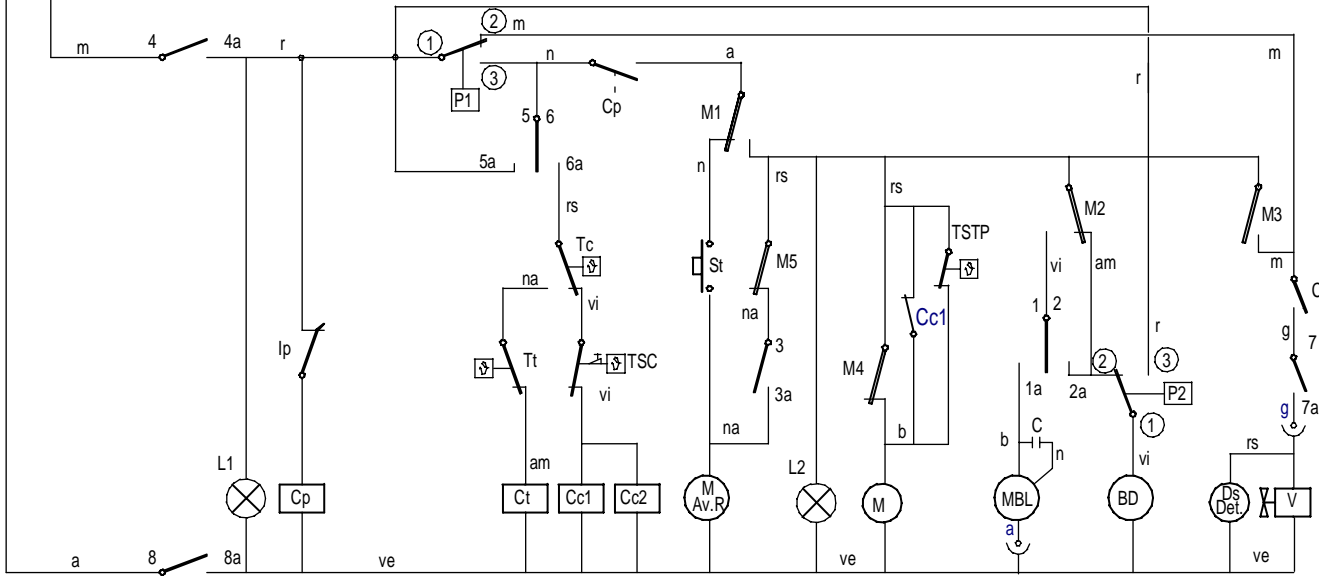
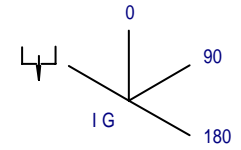
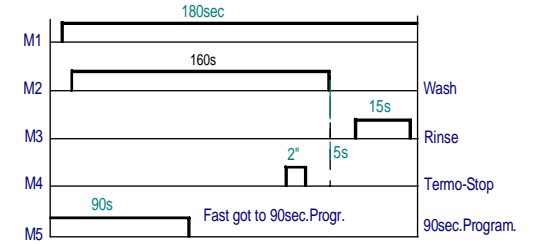
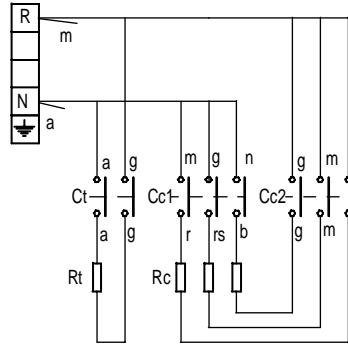
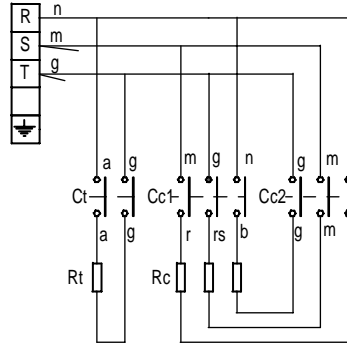
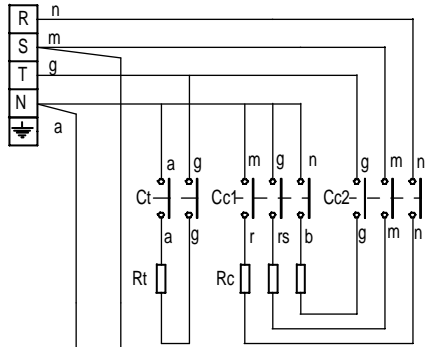
Z-228444000

FI-64 W

380 - 415 V. 3NPh

208-220-240 V. 3Ph

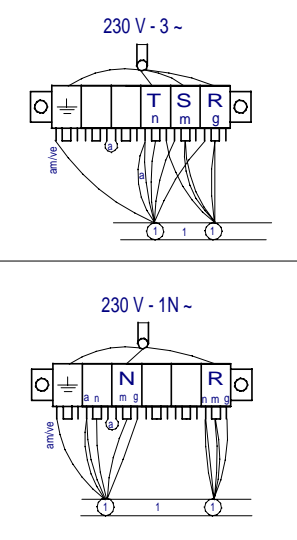
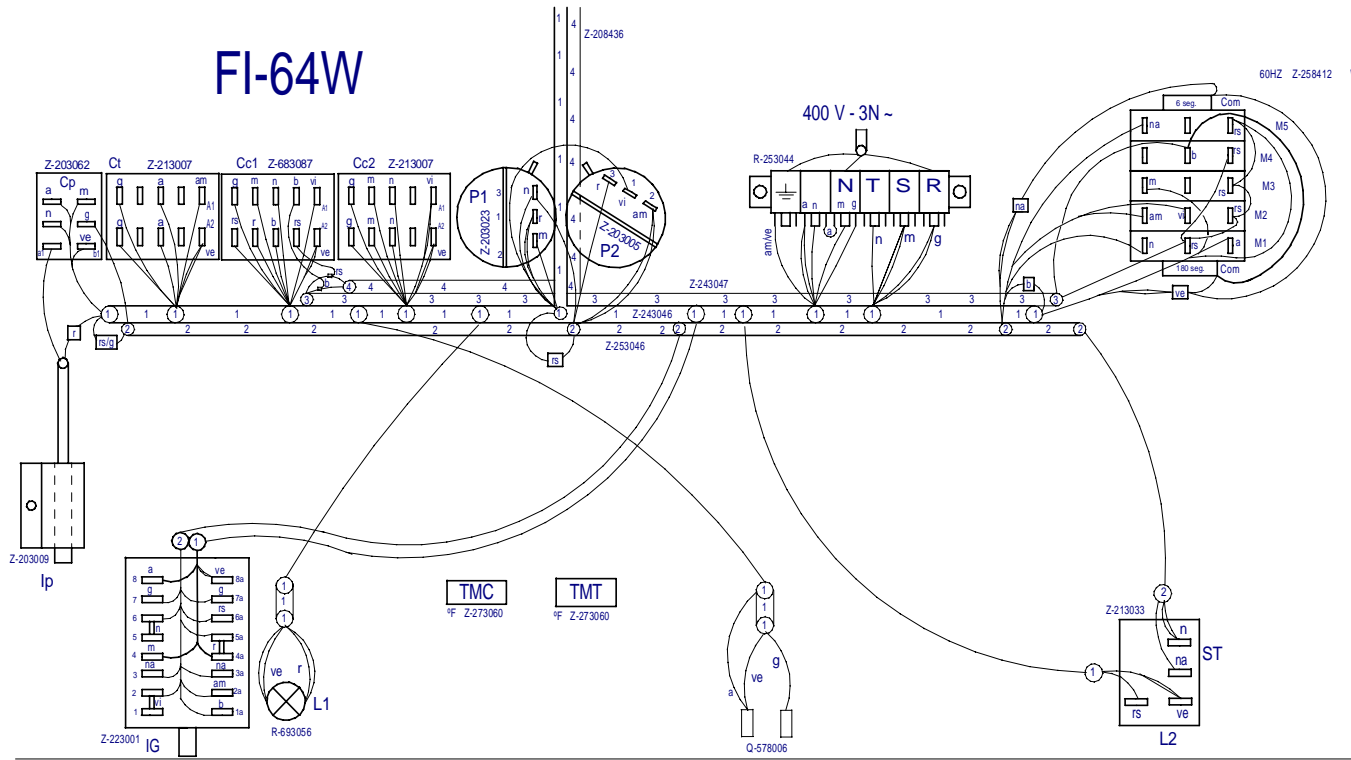
208-220-240 V. 1Ph



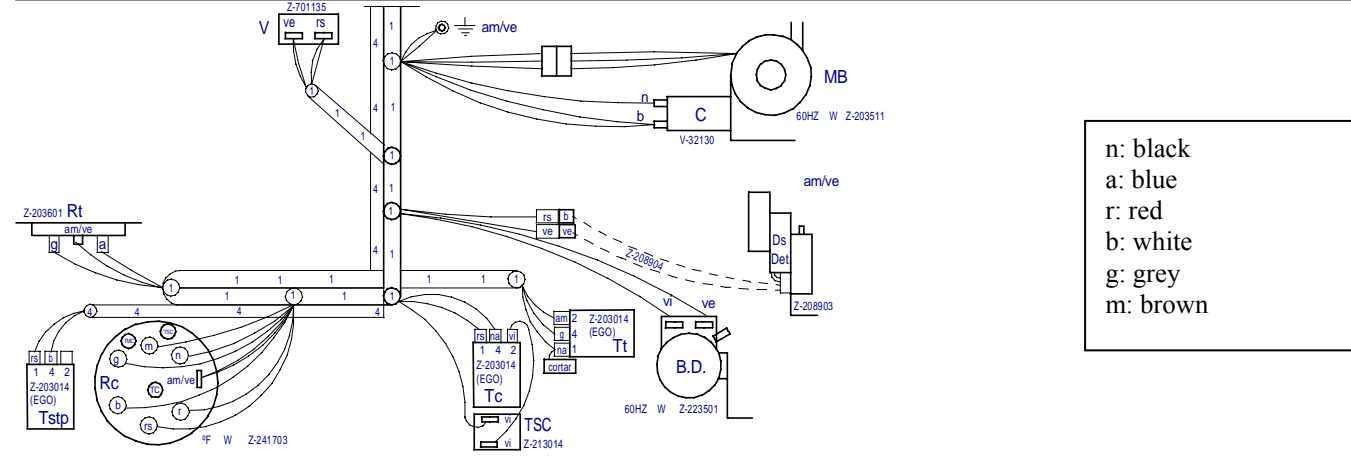
I G	1 1a	2 2a	3 3a	4 4a	5 5a	6 6a	7 7a	8 8a
0		X		X	X			X
90	X		X	X		X	X	X
180	X			X		X	X	X

Z-258439000

FI-64W



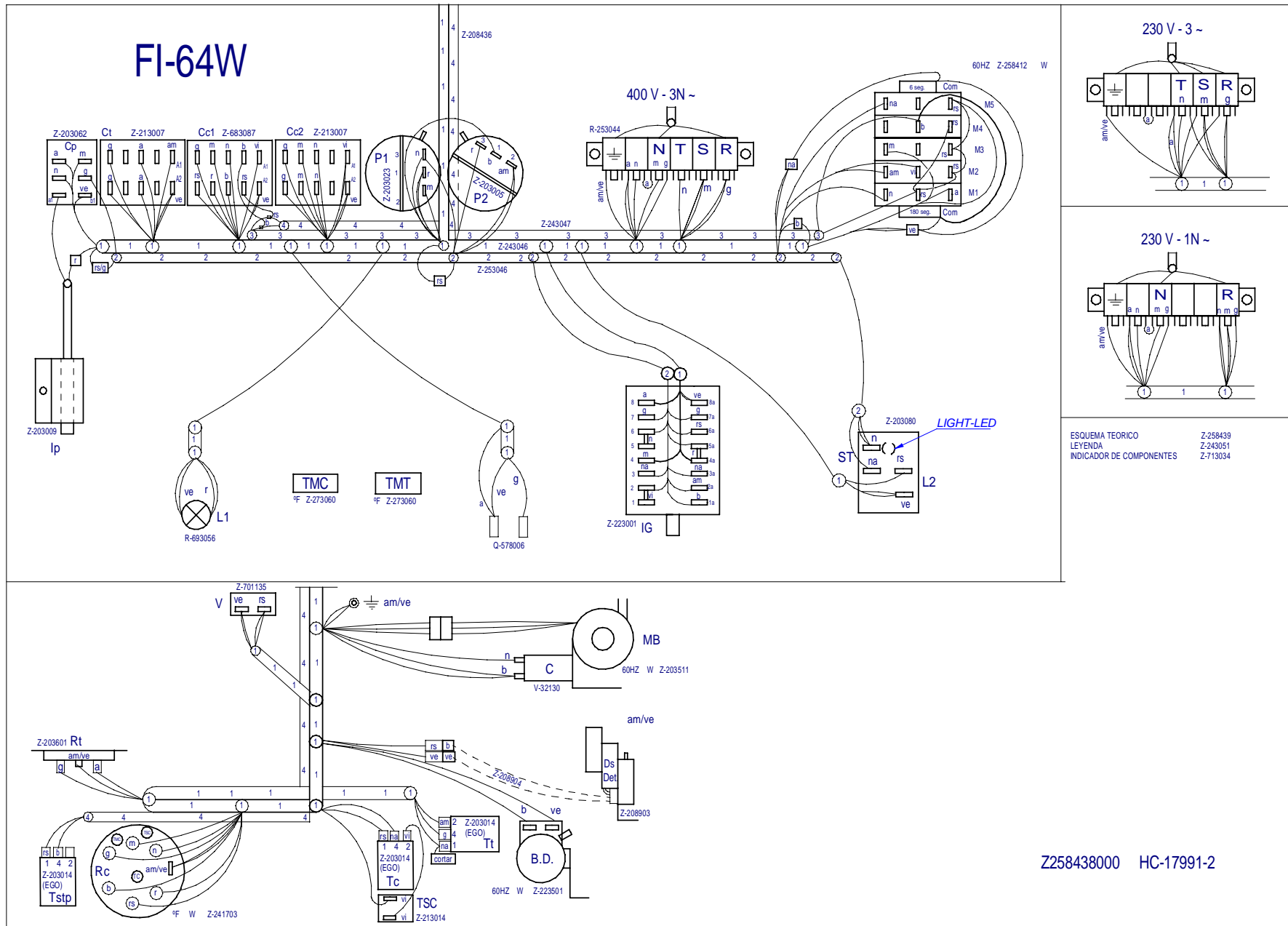
ESQUEMA TEORICO Z-258439
 LEYENDA Z-243051
 INDICADOR DE COMPONENTES Z-713034



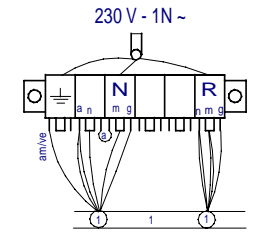
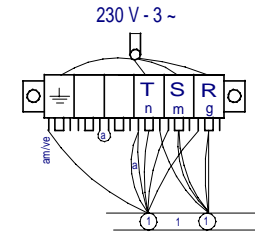
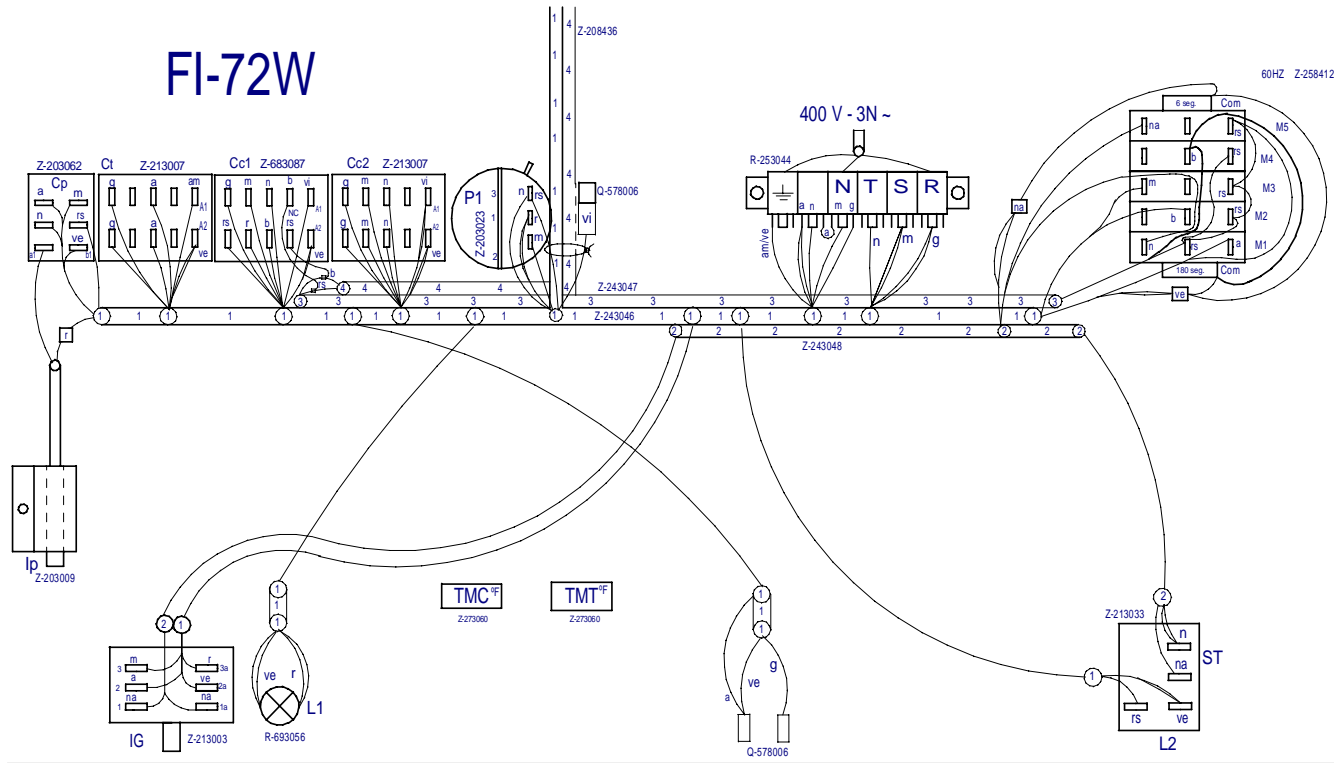
n: black
 a: blue
 r: red
 b: white
 g: grey
 m: brown

Z258438000

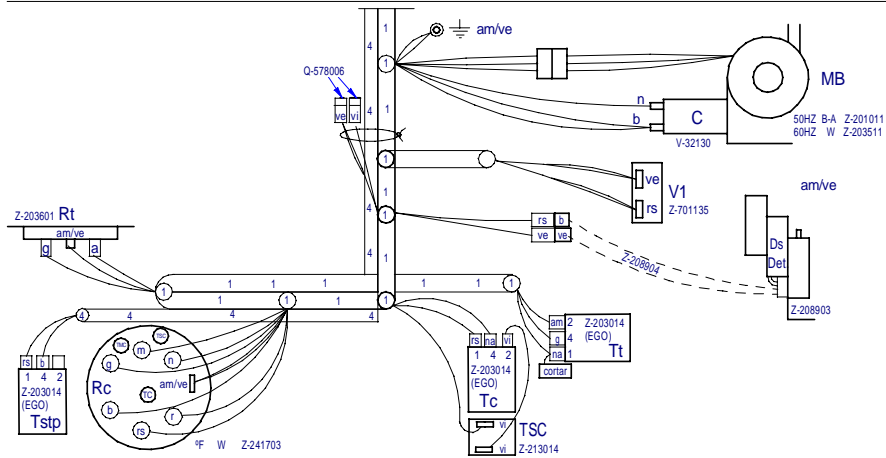
na: orange
 ve: green
 vi: violet
 rs: pink
 am/ve: yellow/green
 am: yellow



FI-72W



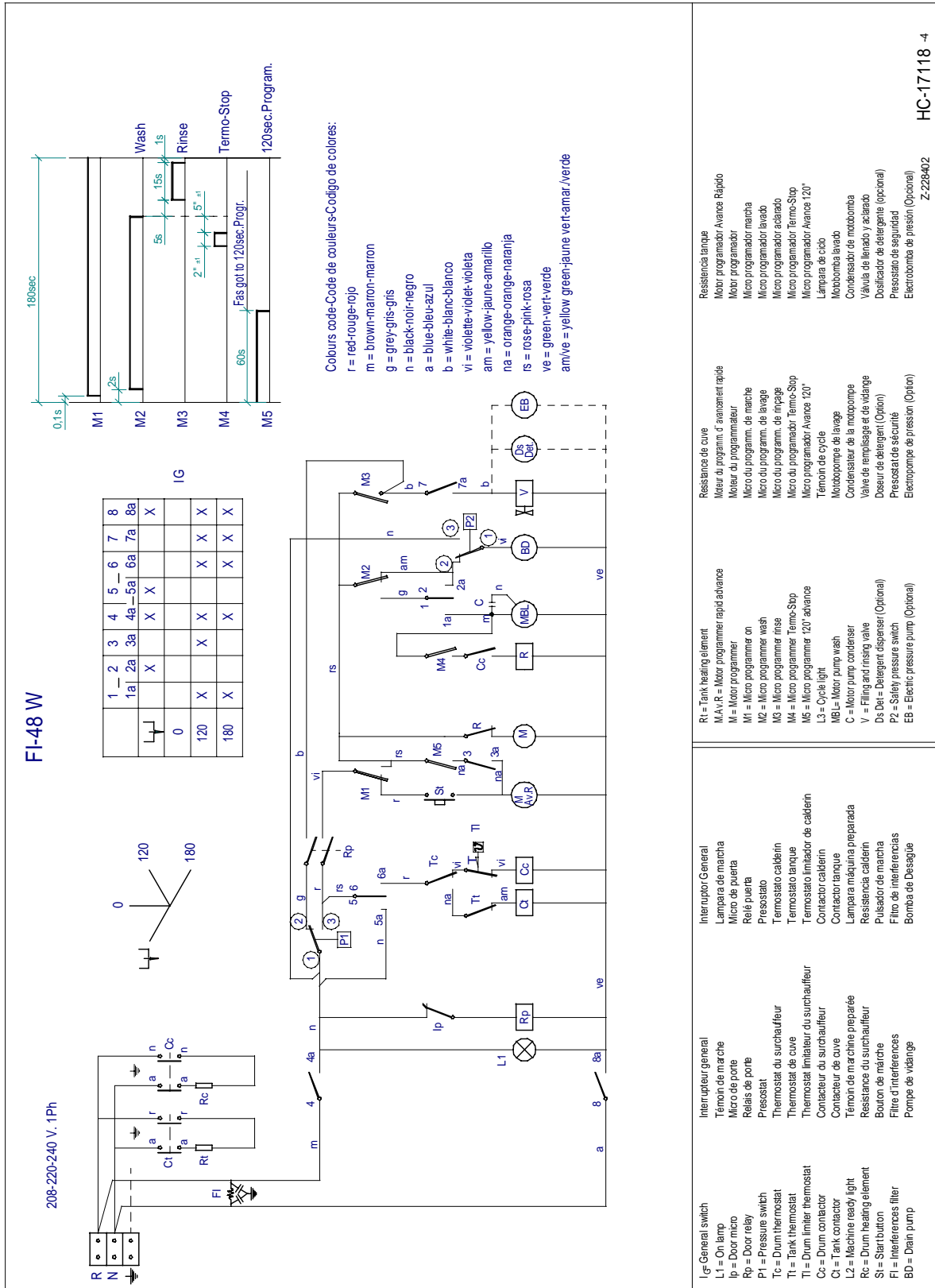
ESQUEMA TEORICO Z-263006
 LEYENDA Z-243051
 INDICADOR DE COMPONENTES Z-713034



- n: black
- a: blue
- r: red
- b: white
- g: grey
- m: brown
- na: orange
- ve: green
- vi: violet
- rs: pink
- am/ve: yellow/green
- am: yellow

Z263006000

10 ELECTRICAL DIAGRAMS (MACHINES BEFORE MAY 2006)



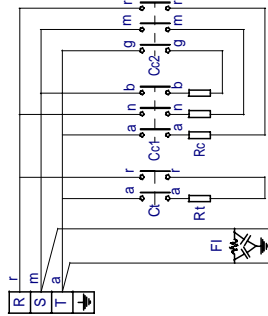
HC-17118 -4

Z-228402

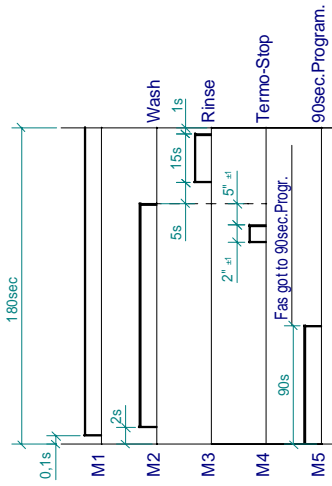
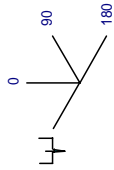
Interupteur general	Interupteur General	Resistencia de cuve	Resistencia tanque
L1 = On lamp	Lampara de marcha	Moteur du programm. d' avancement rapide	Motor programador Avance Rapido
Ip = Door micro	Micró de puerta	Moteur du programmeur	Motor programador
Rp = Door relay	Relé de puerta	Moteur du programm. de marche	Micromotor programador marcha
P1 = Pressure switch	Presostat	Micromotor du programm. de lavage	Micromotor programador lavado
Tc = Drum thermostat	Thermostat du surchauffeur	Micromotor du programm. de impage	Micromotor programador aclarado
Tl = Tank thermostat	Thermostat de cuve	Micromotor du programm. Termo-Stop	Micromotor programador Termo-Stop
Ti = Drum limiter thermostat	Thermostat limiteur du surchauffeur	Micromotor du programm. Avance 120"	Micromotor programador Avance 120"
Co = Drum conactor	Contacteur du surchauffeur	Temoin de cycle	Lampara de ciclo
Ct = Tank conactor	Contacteur de cuve	Motobombe de lavage	Motobomba lavado
L2 = Machine ready light	Temoin de machine preparee	Condensateur de la pompe	Condensador de motobomba
Ro = Drum heating element	Resistance du surchauffeur	Valve de remplissage et de vidange	Valvula de llenado y aclarado
St = Start button	Bouton de marche	Doseur de detergent (Optional)	Dosificador de detergente (opcional)
Fi = Interferences filter	Filter de interferences	Presostat de securite	Presostato de seguridad
BO = Drain pump	Pompe de vidange	Electropompe de pression (Optional)	Electrobomba de presión (Opcional)

MF-64 ; FI-64 W ; FI-64-B-A

208-220-240 V. 3ph

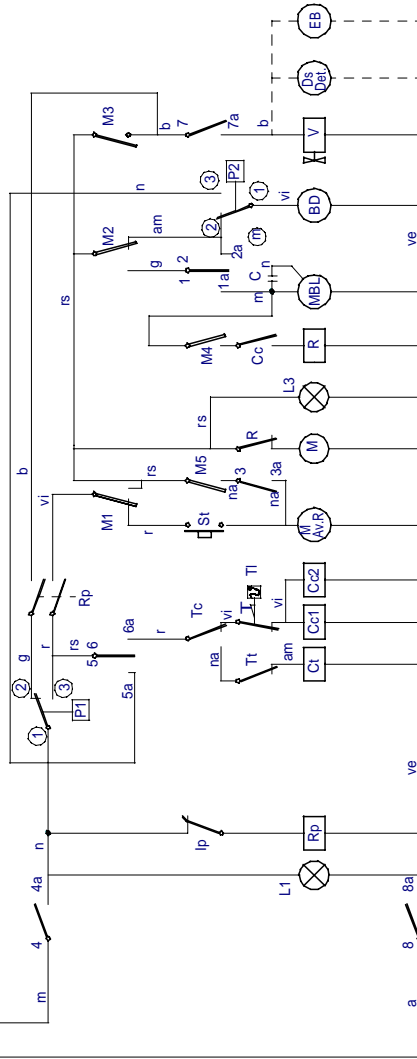


	1	2	3	4	5	6	7	8
	1a	2a	3a	4a	5a	6a	7a	8a
	X	X	X	X	X	X	X	X
IG								
90	X	X	X	X	X	X	X	X
180	X	X	X	X	X	X	X	X



Colours code-Code de couleurs-Código de colores:

- r = red-rouge-rojo
- m = brown-marron-marron
- g = grey-gris-gris
- n = black-noir-negro
- a = blue-bleu-azul
- b = white-blanc-blanco
- vi = violette-violet-violeta
- am = yellow-jaune-amarillo
- na = orange-orange-naranja
- rs = rose-pink-rosa
- ve = green-vert-verde
- am/ve = yellow green-jaune vert-amar/verde



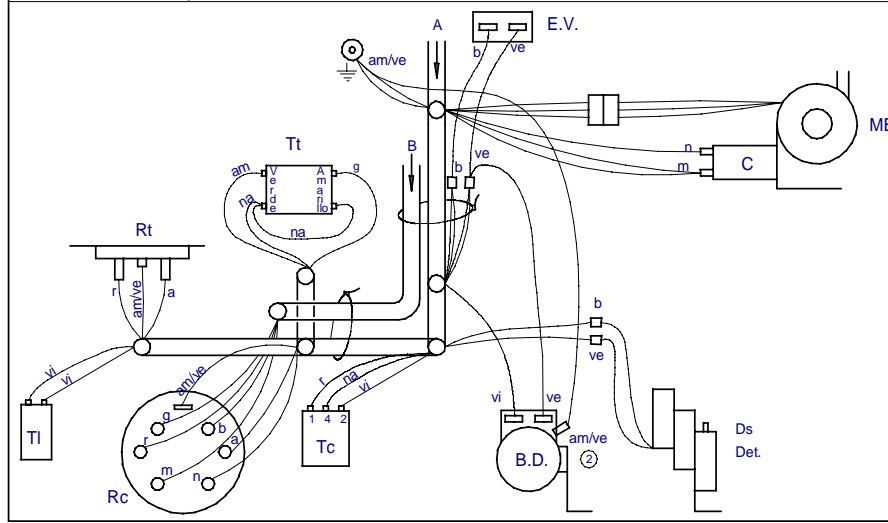
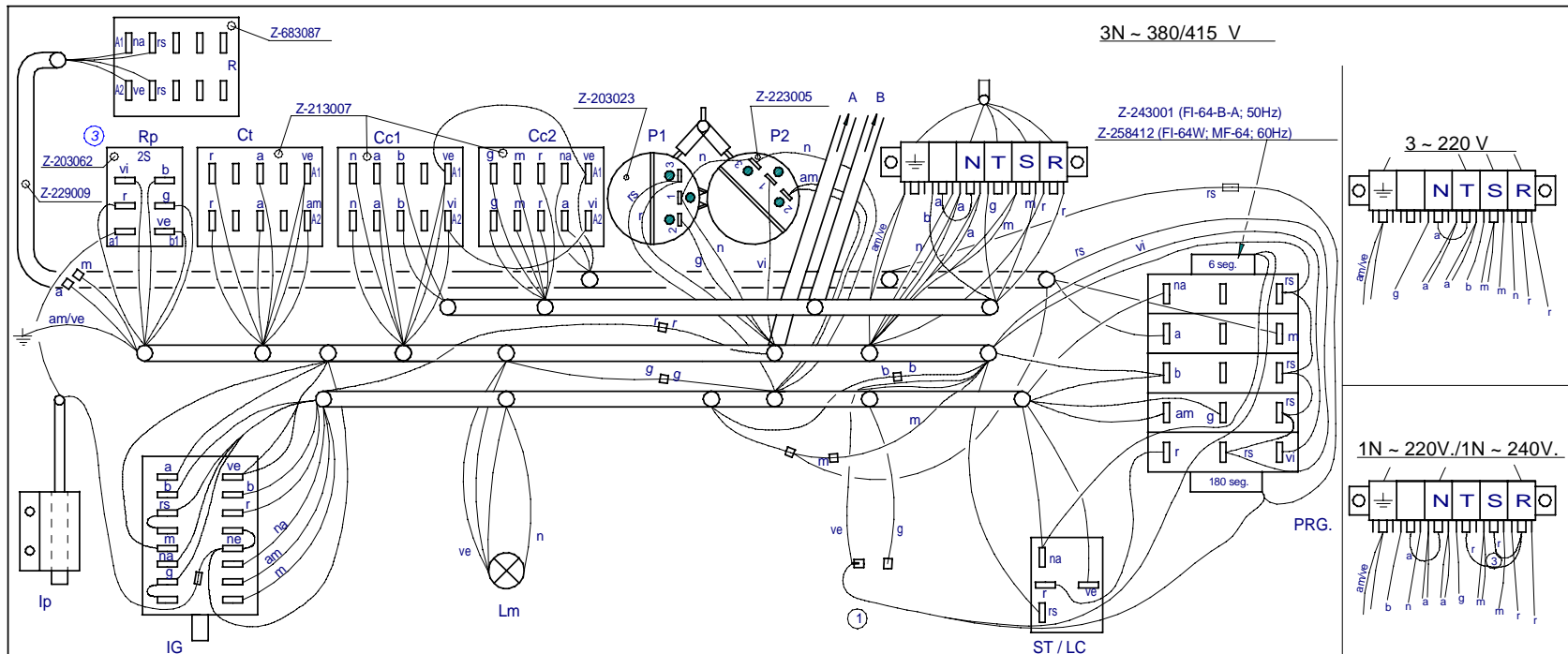
- I_g = General switch
- L1 = On lamp
- Ip = Door micro
- Rp = Door relay
- Tc = Pressure switch
- Td = Drum thermostat
- Tt = Tank thermostat
- Tl = Drum limiter thermostat
- Cc1/Cc2 = Drum contactor
- C1 = Tank contactor
- L2 = Machine ready light
- Rc = Drum heating element
- St = Start button
- Fi = Interferences filter
- BD = Drain pump

- Interrupteur general
- Lampara de marcha
- Micro de puerta
- Relé de porte
- Pressostat
- Termostato del surchauffeur
- Termostato de cuve
- Termostato limitador de surchauffeur
- Contacteur du surchauffeur
- Contacteur cuve
- Témoin de marche préparée
- Resistencia calderin
- Bouton de marche
- Filtre de interferences
- Bomba de Desague

- Ri = Tank heating element
- MAV/R = Motor programmer rapid advance
- M = Motor programmer
- M1 = Micro programmer on
- M2 = Micro programmer wash
- M3 = Micro programmer rinse
- M4 = Micro programmer Termo-Stop
- M6 = Micro programmer 90° advance
- L3 = Cycle light
- MBL = Motor pump wash
- C = Motor pump condenser
- V = Filling and rinsing valve
- DS/Det = Detergent dispenser (Optional)
- PZ = Safety pressure switch
- EB = Electric pressure pump (Optional)

- Resistance de cuve
- Méteur du programm. d'avancement rapide
- Moteur du programmeur
- Micro du programm. de marche
- Micro du programm. de lavage
- Micro du programm. de rinçage
- Micro du programm. Termo-Stop
- Micro programmeur Avance 90°
- Témoin de cycle
- Motobomba lavado
- Condensateur de la motopompe
- Valve de remplissage et de vidange
- Doseur de détergent (Option)
- Pressostat de sécurité
- Electropompe de pression (Option)

- Resistencia tanque
- Motor programador Avance Rápido
- Motor programador
- Micro programador marcha
- Micro programador lavado
- Micro programador aclarado
- Micro programador Termo-Stop
- Micro programador Avance 90°
- Lámpara de ciclo
- Motobomba lavado
- Condensador de motobomba
- Válvula de llenado y aclarado
- Dosificador de detergente (opcional)
- Presostato de seguridad
- Electrobomba de presión (Opcional)



Esquema montaje FI-64 W; MF-64; FI-64-B-A		Z-258406	
Nº	Pieza	Material	Nº Clasificación
Nº	Modificación	Propuesta de	Fecha
①	Introd. Versión FI-64-B-A; eliminar piloto Lmp	J.M.P.	28-12-00
②	Añadir cable tierra en bomba desague	Santi	4-6-2001
③	Sustituir relé Z-203018 por Z-203062; cambiar colores en Rp	J.M.P.A.	02-05-13
		Tolerancias generales	
		<±	50-100± :
		5-25± :	> 100± :
		25-50± :	∞± :
Dibujado		Firma	Fecha
Proyectado		S. N.	24-3-00
Comprobado			
Escala			
Fagor Industrial, Koop, Eik, Mugatua			Mecanizado superficial
LAVAVAJILLAS			Plano numero
			HC-17220 - 3
Plano hau ez daitete erabili ez berzita gure balmentz gabe			Sustituye al Nº
			Sustituido por

12 SEQUENCE FLOW CHARTS (MACHINES BEFORE MAY2006)

12.1 TIMER WIRING SCHEMATIC

(See Fig. 9-1 in next page)

The cycle timer is comprised of 5 sections (M1 to M5). Each one has a 3 position micro switch (line /normally closed /normally open) and 2 drive motors (run/cycle and rapid advance/start).

M1: this is the (ON) cycle micro, and stays activated throughout the completion of the cycle. (90/ 180 / drain). The M-1 line in (pu) wire comes from the press valve (P1) and feeds the (r) normally closed position to the start switch as well as the (pk) to normally open position on (M1) and line in to (M2/ M3 / M5). Also the cycle light and timer (run) motor is fed via this line.

Note: the (pk) to timer run-motor runs from M1 thru thermo-stop.

M2: Wash sequence micro. In this sector the (pk) line feed supplies the normally open position (gy) line to selector position (# 1 & # 2). Pump motor (MBL) is energized upon activation of the micro thru position (#1a) down to the motor. Drain pump (BD) is energized upon activation of the micro thru position (#2a) down to the pump.

In the normally close position the (y) will feed press valve (P2) for drain.

Note: position (1a) also feeds M4 to be discussed later.

M3: the rinse sequence micro. In this sector the (pk) line feed supplies the normally open (w) position to the fill valve. Upon activation the water valve is energized for 15 seconds of rinsing.

M4: thermo-stop sequence micro. This sector is fed from the selector position (# 1a) and supplies the thermo-stop thru the normally open (w) in sector M4 to the booster relay (bl / or) to (or) in thermo-stop.

Note: Thermo-stop, in series with booster relay, is insuring a high – temp rinse and food safety guidelines.

M5: Fast advance motor sequence. This sector is fed from (pk) (M1/M2/M3) to the normally open position (or) to selector position (#3 to #3a) to advance motor.

12.2 START SWITCH

(See Fig. 9-2 in next page)

Once the machine completes its heating cycle you are ready to run the wash. Pressing the start rocker switch will momentarily activate the timer's advance motor activating the M1 sector of the timer, and thus starting the selected (90 or 180) wash cycle. This is also the cycle light which will be lit throughout the duration of the cycle.

FIG: 9-2

- 1) This feeds the rapid advance feature / start motor on the timer,
- 2) Line #2 from timer (M1) this activates start motor on timer and starts cycle
- 3) Timer activates cycle light thru duration on cycle chosen

Start switch & cycle light

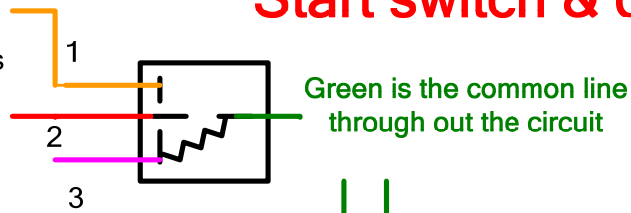


FIG: 9-1

FI-48W timer

Timer breakdown

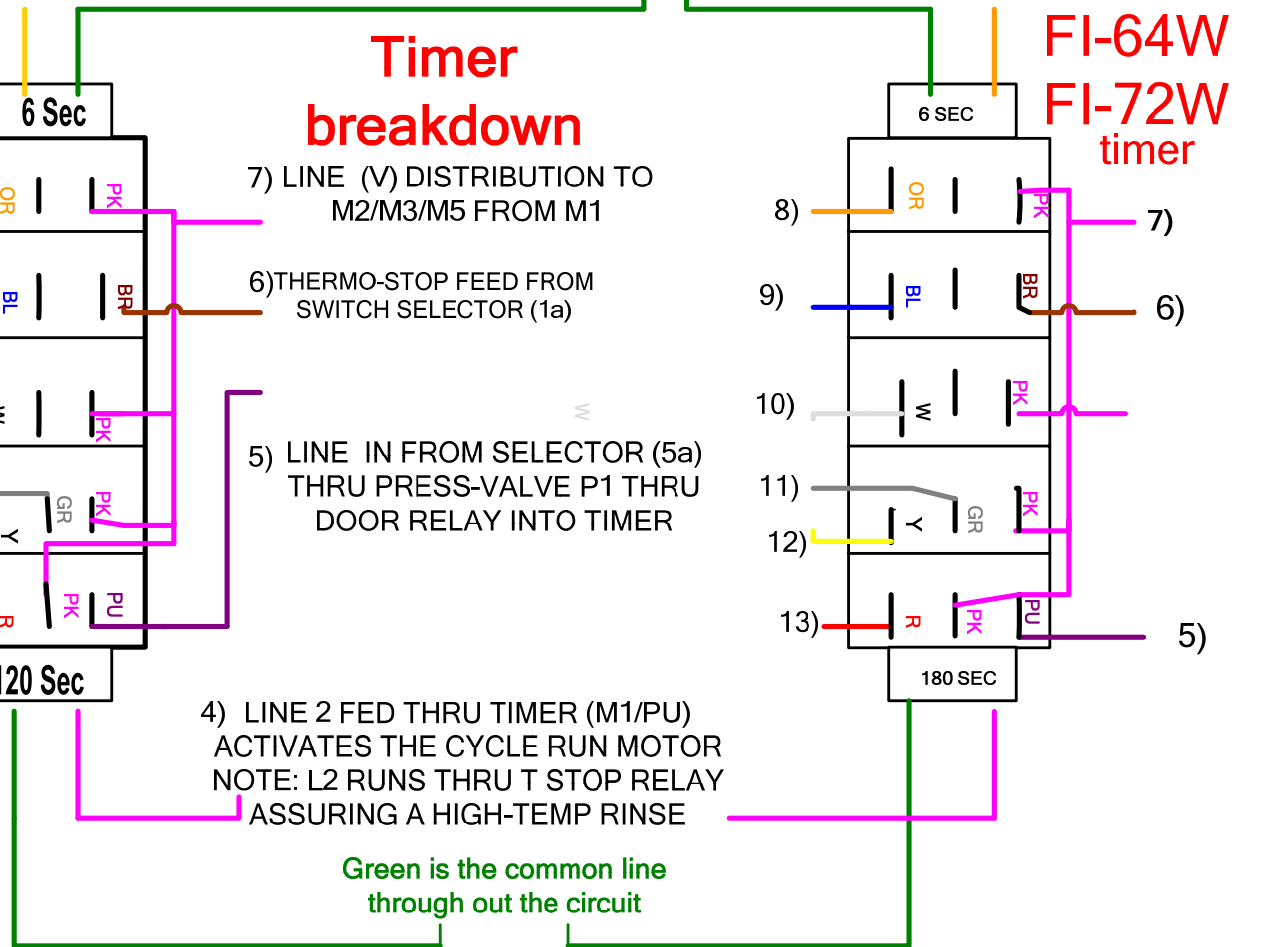
**FI-64W
FI-72W timer**

- 8) TO RAPID ADVANCE TIMER MOTOR FOR SHORT CYCLE
- 9) TO THERMO-STOP THRU BOOSTER RELAY
- 10) TO FILL VALVE FILL/RINSE
- 11) TO PUMP MOTOR FOR WASH CYCLE
- 12) TO DRAIN PUMP THRU PRESS-VALVE P2
- 13) TO START SWITCH

- 7) LINE (V) DISTRIBUTION TO M2/M3/M5 FROM M1
- 6) THERMO-STOP FEED FROM SWITCH SELECTOR (1a)
- 5) LINE IN FROM SELECTOR (5a) THRU PRESS-VALVE P1 THRU DOOR RELAY INTO TIMER

- 4) LINE 2 FED THRU TIMER (M1/PU) ACTIVATES THE CYCLE RUN MOTOR
NOTE: L2 RUNS THRU T STOP RELAY ASSURING A HIGH-TEMP RINSE

Green is the common line through out the circuit



12.3 THERMO-STOP (HOT WATER ASSURANCE)

(See Fig. 9-3 in next page for model FI-64W & FI-72W)

The thermo-stop relay (R) works in series with the rinse (booster) heater relay (Cc) and is activated through M4. This relay insures the timer will not advance to the rinse cycle until the preset temperature of the rinse water is met, (185° + or -10°). This is the hot temperature assurance feature for the dishwasher.

The thermo-stop relay is a normally closed contact that is activated thru the rinse (booster) relay when M4 is closed (2 seconds). If the rinse relay (Cc) is activated, when heating the rinse water, the thermo-stop relay (R) will also be activated and the contact will be open now.

This in turn will open the circuit between the timer's run motor, keeping the cycle in the wash mode until the adequate rinsing temperature is achieved. At this time, operating thermostat (Tc) will change, so the rinse relay will be deactivated and open, also opening the thermo-stop relay and closing the circuit to the timer run motor, allowing the cycle to continue to the rinse cycle.

Note: Although the rinse temperature has reached its set guideline, the wash temperature will still need to heat up to 150°F. This however will not affect the thermo-stop relay.

12.4 SELECTOR SWITCH (IG)

0 : When 0 setting is selected, all the contacts are open.



: When drainage setting is selected, contacts: 2-2a, 4-4a, 5-5a and 8-8a of the electrical diagram are closed.

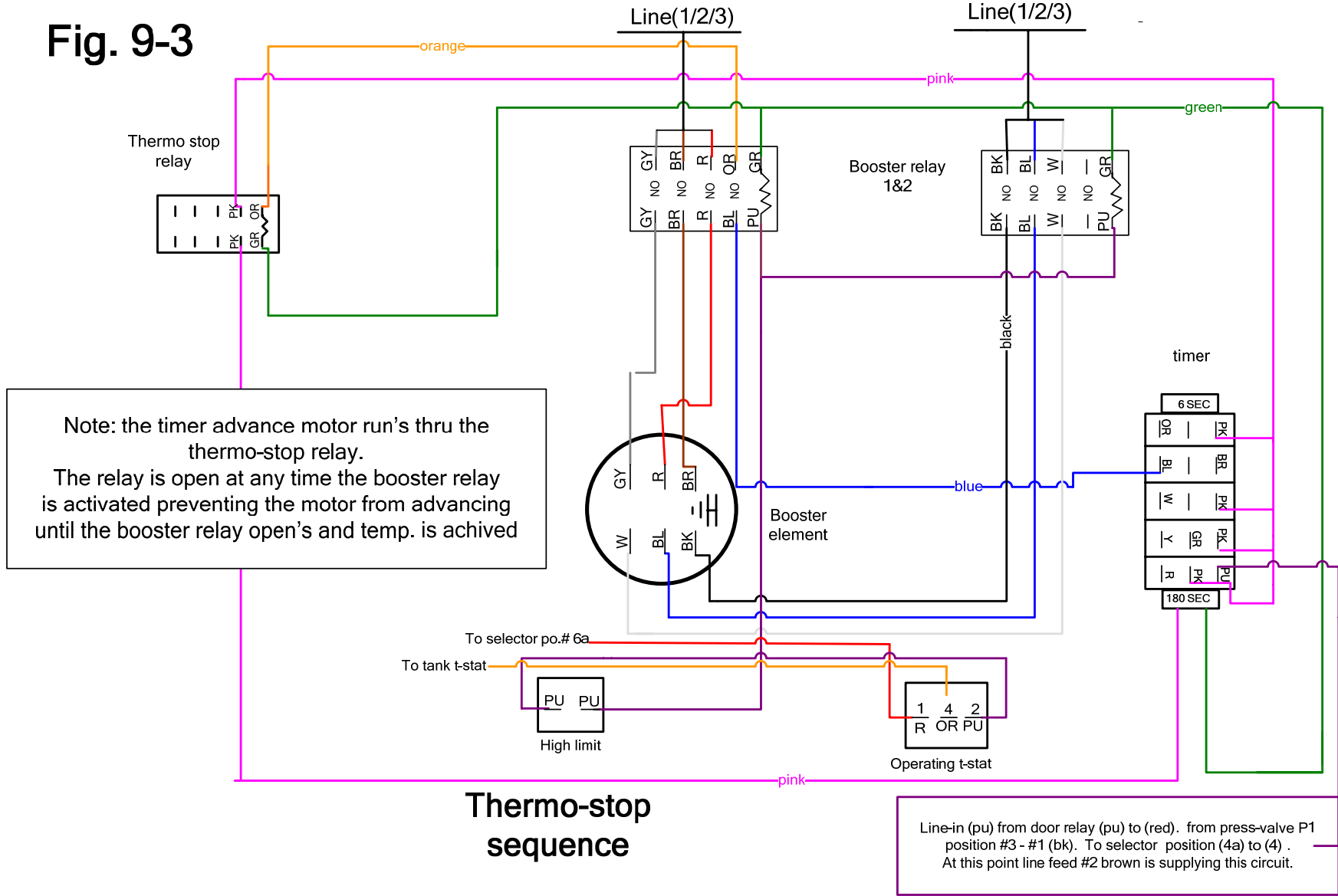
- When 180 seconds cycle is selected, contacts: 1-1a, 4-4a, 6-6a, 7-7a and 8-8a of the electrical diagram are closed.
- When 90 seconds cycle (FI-64W) or 120 seconds cycle (FI-48W) is selected, contacts: 1-1a, 3-3a, 4-4a, 6-6a, 7-7a and 8-8a of the electrical diagram are closed.

12.5 SAFETY PRESSURE SWITCH

Safety pressure switch (P2) is normally in position 1-2 and activates the drain pump when drain setting is activated by the selector switch.

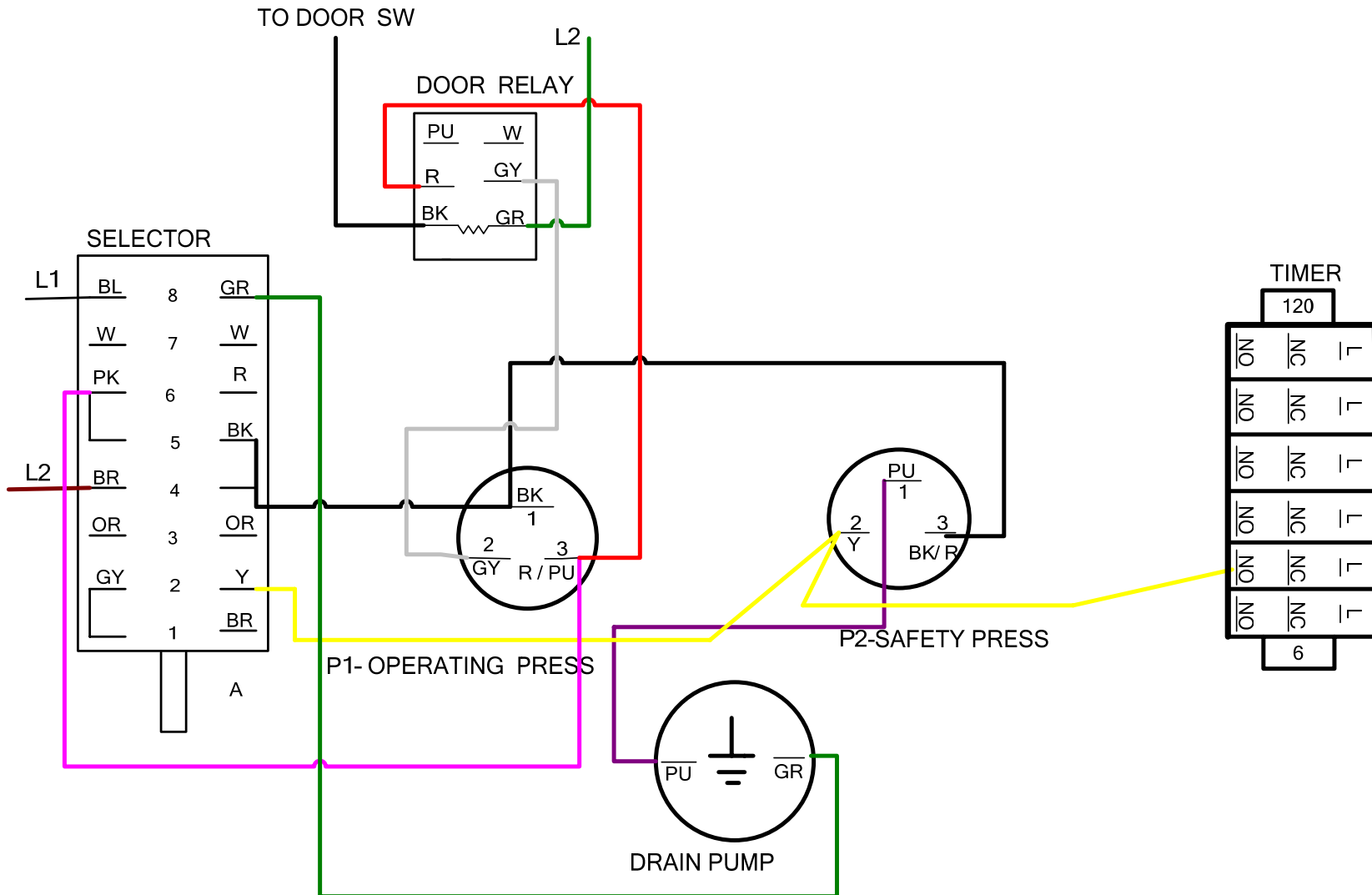
P1 is adjusted in order to change position from 1-2 (filling) to 1-3 (operating), once the tank has been filled up. P2 is adjusted at a higher value of pressure to change from position 1-2 to 1-3. When position 1-3 is activated, normally in case of overflow or fails on the pressure switch, drain pump comes on automatically and machine will start draining independently of the selection. *Check out schematic on page 23.*

Fig. 9-3



FI-48W FI-64W
FI-72W

SAFETY PRESSURE SWITCH SCHEMATIC



13 SERVICE PROCEDURES

13.1 TANK THERMOSTAT

Part number: Z718405 (adjusted at 150°F) – Blue and red points / Z718441 (adjusted at 160°F) – Yellow and red points.

Notes: Replace the 150°F thermostat by the 160°F if you are having problems reaching washing temperatures.

TOOLS NEEDED:

Phillips Screwdriver (#2)
Small flat screwdriver

PROCEDURE:

- 1- Remove lower front panel
- 2- Remove electrical connections
- 3- Pull out thermostat
- 4- Replace gasket if it is in bad condition
- 5- With gasket in place, insert the thermostat inside the gasket, little by little with the help of a small flat screwdriver
- 6- Reconnect & reassemble following process inversely.



Time estimated: 15 minutes

13.2 WATER VALVE

Part number: Z701135

TOOLS NEEDED:

Phillips Screwdriver (#2)
Flat Head Screwdriver

PROCEDURE:

- 1- Remove back panel
- 2- Remove lower back panel
- 3- Remove water inlet hose
- 4- Remove electric water valve mount screws
- 5- Remove electrical connections
- 6- Remove 2nd water hose
- 7- Replace with new component
- 8- Reconnect & reassemble following process inversely



Time estimated: 15 minutes

13.3 BOILER THERMOSTAT

Part number: Z203014

Notes: Be sure that thermostat is full open, in order to get the proper sanitized rinsing temperature (195°F) . Turn it clockwise up to the end.

TOOLS NEEDED:

Phillips Screwdriver (#2)
10mm Nut driver

PROCEDURE:

- 1- Remove lower front panel
- 2- Remove thermostat from support bracket
- 3- Pull out sensor from boiler
- 4- Replace with new component
- 5- Reconnect & reassemble following process inversely



Time estimated: 15 minutes

13.4 TIMER

Part number: Z228412 (FI-48W) / Z258412 (FI-64W)

TOOLS NEEDED:

Phillips Screwdriver (#2)

PROCEDURE:

- 1- Slide out front panel
- 2- If accessibility is not good enough, remove top lid.
- 3- Write down connections (colours) on the timer, before Removing.
- 4- Take out timer
- 5- Remove the electrical connections
- 6- Replace with new component
- 7- Reconnect connections with the help of your notes
- 8- Reassemble following process inversely

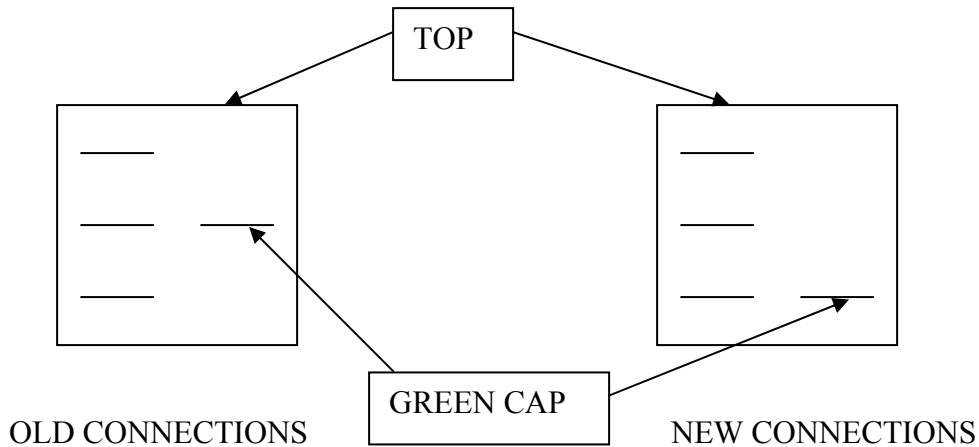


Time estimated: 15 minutes

13.5 START BUTTON

Part number: Z213033

Note: There has been a modification on the start button for Fagor dishwashers. The new one is more ergonomic and 1 of terminals (green connection) is in a different position. However they are exchangeable and connections don't change either, as it is shown on the pictures and drawings below.



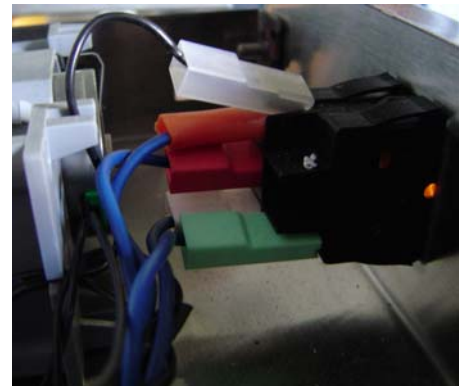
TOOLS NEEDED:

Phillips Screwdriver (#2)

PROCEDURE:

- 1- Slide out front panel
- 2- Remove connections
- 3- Replace with the new timer
- 4- Reconnect and Reassemble following process inversely

Time estimated: 15 minutes

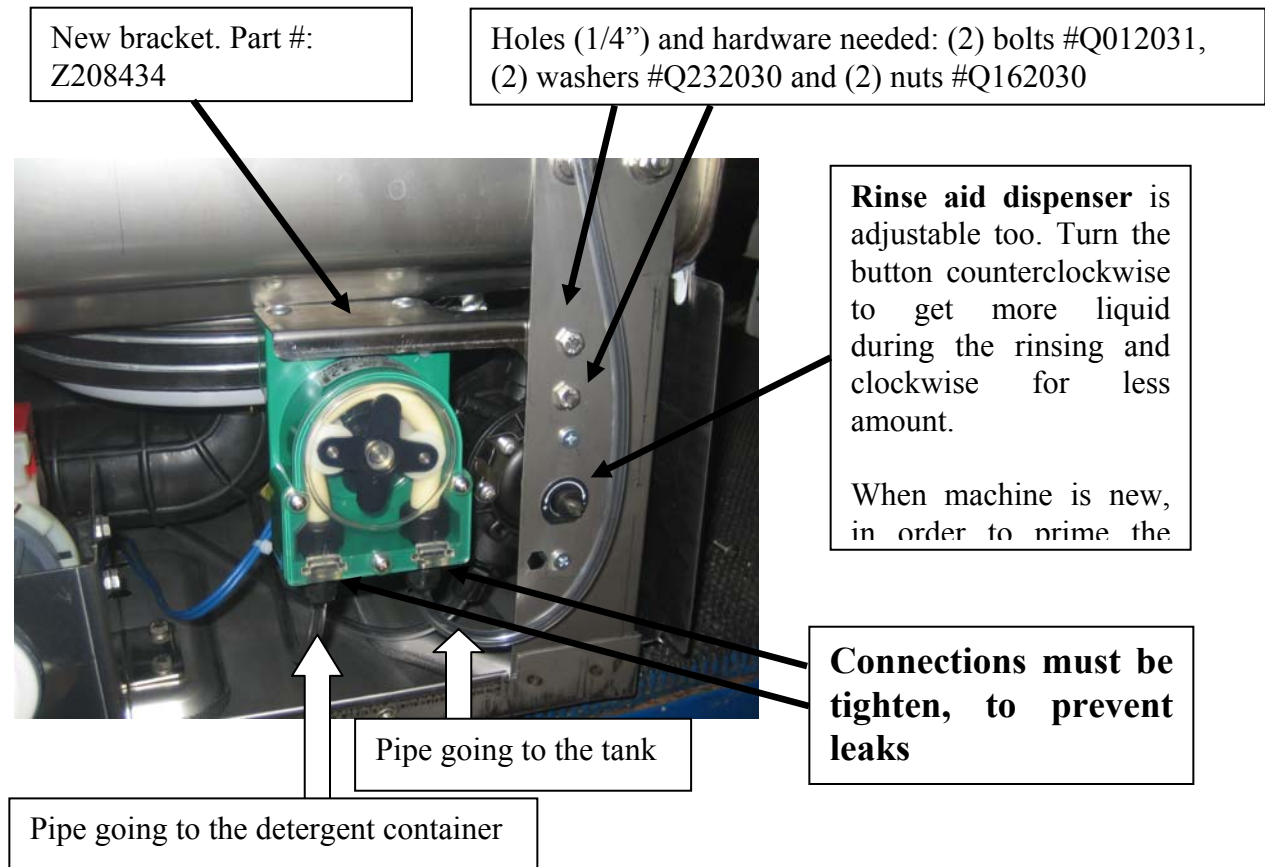


14 DETERGENT PUMP NEW LOCATION

Be sure your detergent pump has the position shown below. If not, follow instructions to reverse your pump:

Tools needed:

- Drill and 1/4" drill bit
- 5" Nut driver
- #2 Philips screwdriver



Procedure:

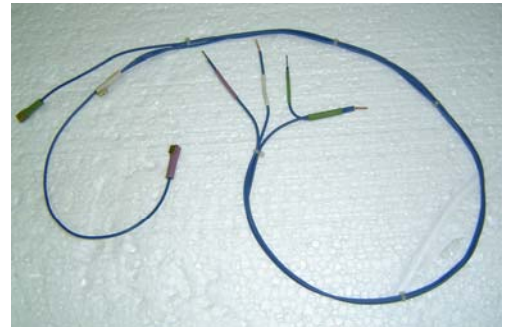
- 1- Open front bottom panel
- 2- Remove two screws of rinse aid dispenser to have a better access.
- 3- Be sure that the bracket on the pump is the one shown above (part n°: Z208434)
- 4- If not, attach pump to the bracket with (2) bolts, (2) washers and (2) nuts supplied
- 5- Drill two holes 1/4" diameter. 5" and 6" from the bottom and 1/2" from the left.
- 6- Use (2) bolts, (2) washers and (2) nuts supplied to hold the bracket and the pump.
- 7- Fit detergent pipes on the pump. Check out above to see which one goes to the tank and which one goes to the detergent container.
- 8- **TIGHTEN DETERGENT PIPE CONNECTIONS**
- 9- Put back rinse aid dispenser in its position

15 PROCEDURE TO INSTALL EXTERNAL CHEMICAL PUMP

A) ELECTRICAL CONNECTIONS

Wiring kit must be supplied from Fagor to make the electrical connections. Contact 1 866 - GO FAGOR (463-2467) to be supplied with one.

One side of the wiring kit has three caps (White, Violet and Green) with jumpers. The other side has 4 bare wires (White, Violet and (2) Greens)



PROCEDURE to connect the wiring kit:

Connect the Green Cap of the wiring kit in the terminal block with the blue caps. FIG.1

Connect the Violet Cap of the wiring kit in the first position of the selector switch. FIG.2

Connect the White Cap of the wiring kit in the second position of the timer (M2), third row, together with the yellow cap of the timer

The other side of the wiring kit remains the 4 bare wires. Connect Violet and Green Wires into the Detergent Pump. Pump will have voltage during the wash cycle. Connect White and Green Wires into the Rinse Pump. Pump will have voltage during rinse cycle.

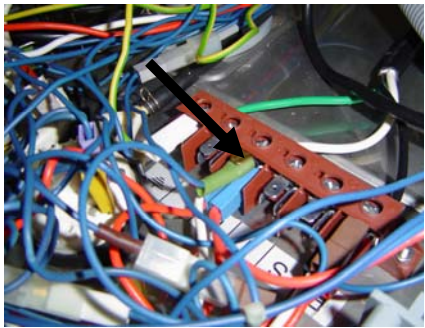


FIG. 1

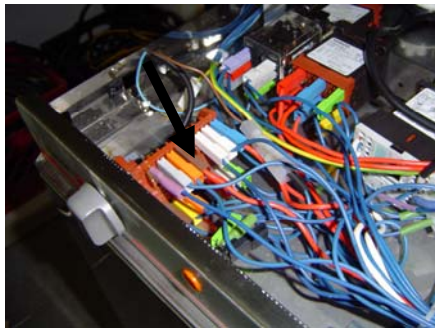


FIG.2



FIG. 3

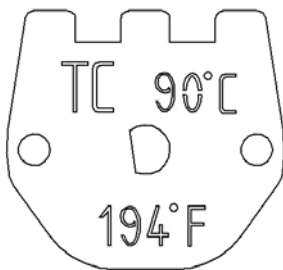
B) INJECTORS CONNECTIONS

External Detergent Injector must be installed above the stainless steel scrap filters.

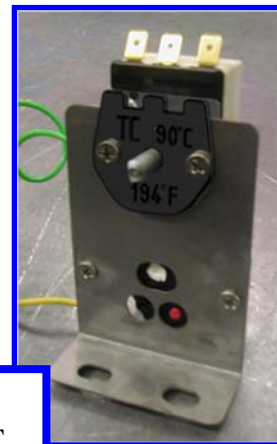
Remove black hose connected to the current rinse dispenser. Connect External Rinse Injector into the black hose



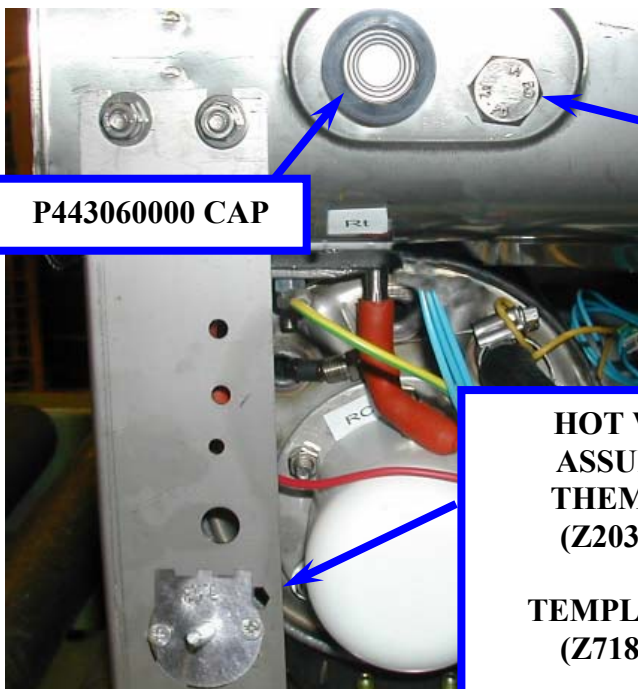
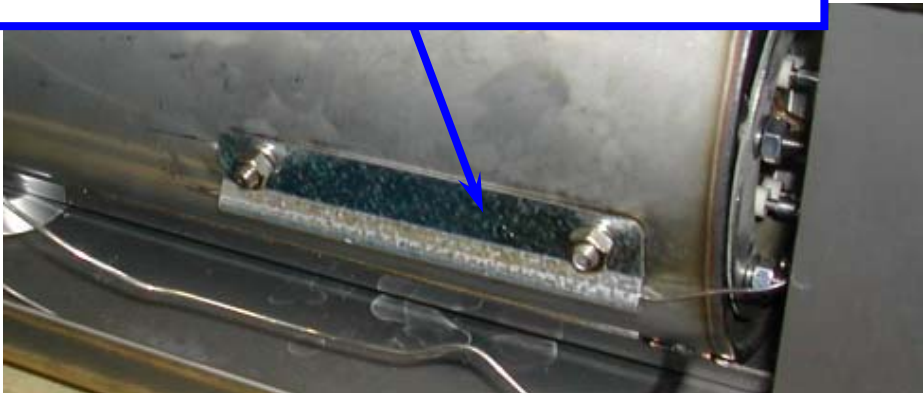
16 THERMOSTAT CONFIGURATIONS (AFTER OCTOBER 2006)



**BOILER THERMOSTAT
(Z203014)
+
TEMPLATE 90°C
(Z208438000)**



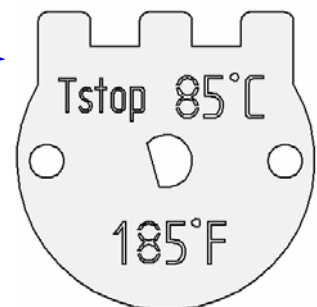
**Z748008000
BOILER THERMOSTAT PROBE HOUSING BRACKET**

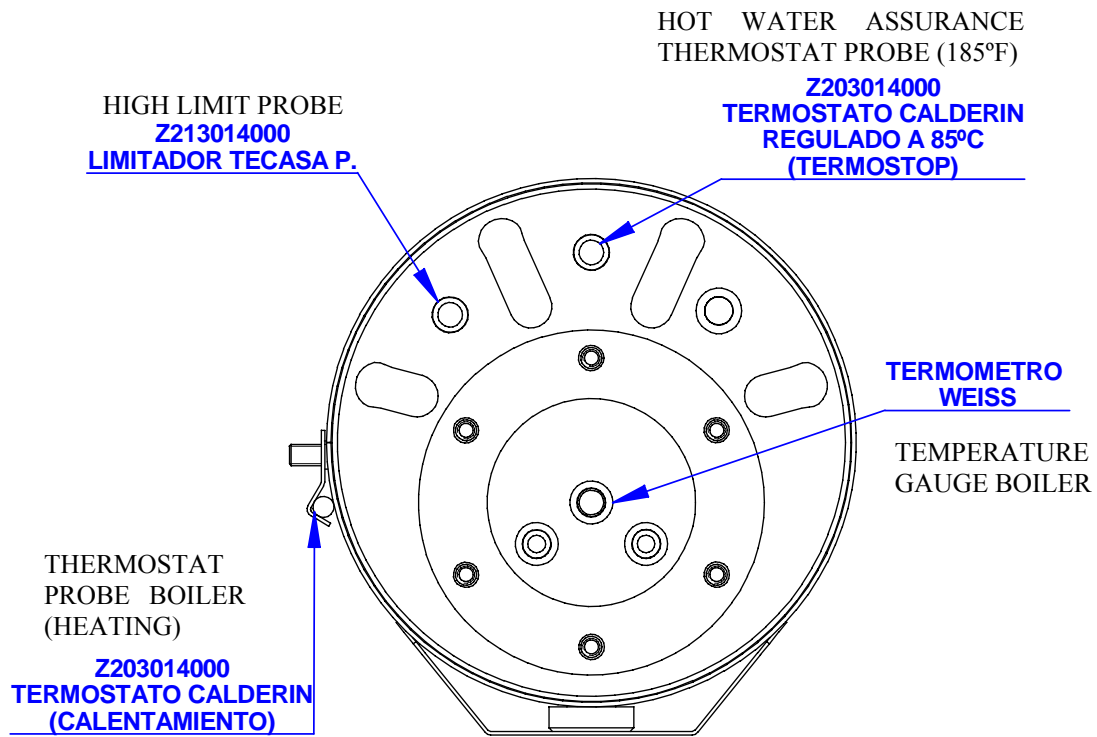
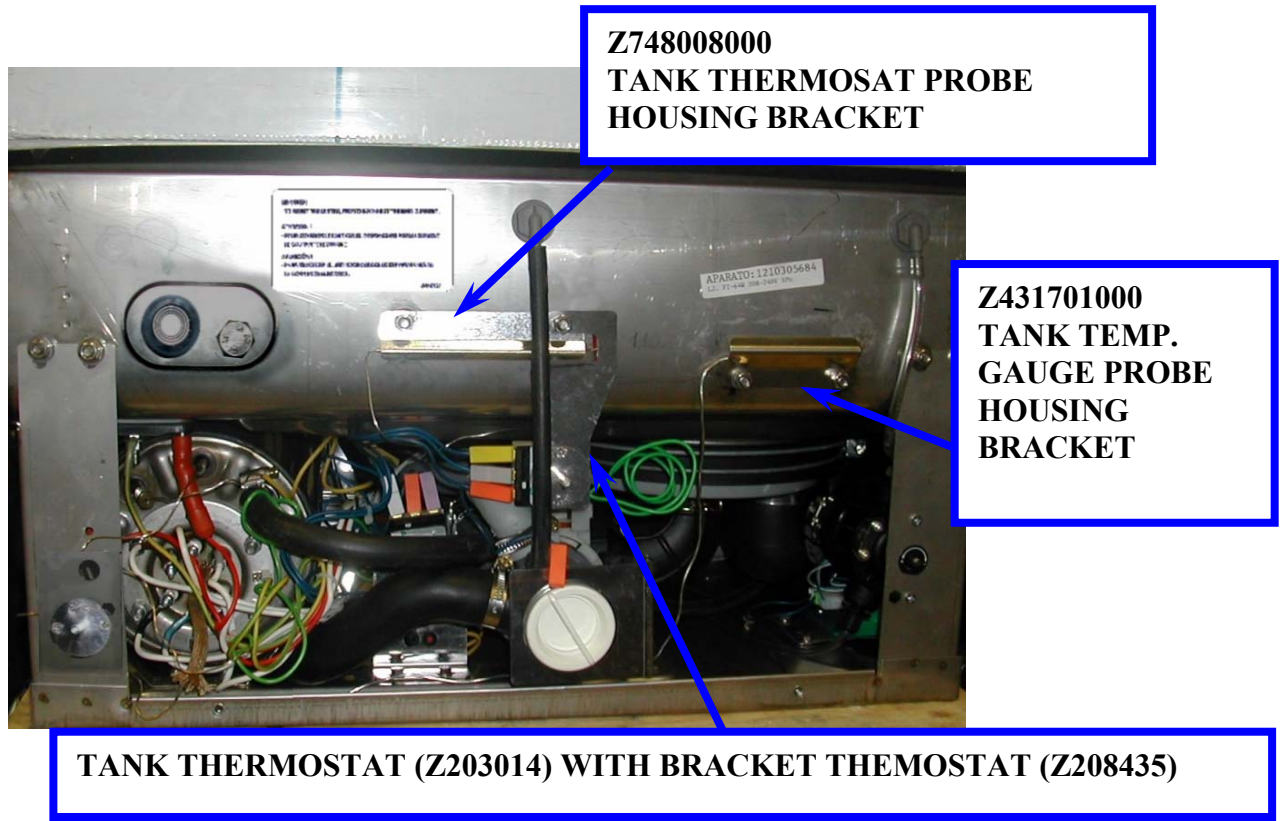


P443060000 CAP

**Q012073000
BOLT M12X20
+
Q162070000
NUT M12
+
Q306024000
GASKET 18x12.5x1.5**

**HOT WATER
ASSURANCE
THERMOSTAT
(Z203014000)
+
TEMPLATE 85°C
(Z718446000)**





17 RECOMMENDED SPARE PARTS

<i>Part Number</i>	<i>Description</i>
Z201720	Heating element for booster 2800 W. 230V.(FI-48W)
Z241703	Heating element for booster 6000W. 230V.(FI-64 / 72W)
Z203009	Door switch
Z203014	Thermostat
Z743009	Contactora for booster 230V. 50/60 Hz. (FI-48W)
Z683087	Contactora 230V. 50/60 Hz. (FI-64 / 72W)
Z203062	Door relay 230V 50/60Hz
Z203023	Level pressure switch
Z203511	Pump Motor 60Hz.
Z203601	Heating element for tank 2800W. 230V.
Z211903	Rinsing nozzle
Z213007	Relay 230V. 50-60Hz.
Z213014	Safety thermostat
Z213033	Start button
Z223001	Selector switch
Z223005	Safety pressure switch
Z228412	Timer 60 Hz. T. Stop (FI-48W)
Z258412	Timer 60 Hz. T. Stop (FI-64 / 72W)
Z701135	Water fill valve
V321300	10 MF Capacitor
Z223501	Drain pump (FI-48 / 64W)
Q307051	Gasket for Overflow Tube
Z200909	Overflow Tube
Z231105	Antireturn valve
R253044	Terminal Block
Z200107	Adjustable Leg
Z651123	Rinse Aid Dispenser
1200000132	Detergent Pump Kit

18 WARRANTY GUIDELINES

1. SERVICE ISSUES

When a service issue occurs, the end user must call Fagor to report the problem. Our toll free number: 1-866-GO-FAGOR is located in the front of the machine. If the issue can not be resolved by phone, Fagor will contact the closest Authorized Service Agency for assistance and will forward the information regarding the issue. The Agency will be provided with an Authorization Number only if the warranty still remains effective. Serial number of the machine must be provided by the end user or by the service agency to Fagor.

Distributors and dealers are not permitted to send Service Agencies without authorization from Fagor's Service Department.

2. PARTS

Service Agencies will be provided with the name of the Parts Distributor in his territory. All orders for parts within the warranty period as well as for parts out of warranty must be sent to the Distributor. Distributor must deliver the part to the Agency. If the Distributor does not have the item in stock, they must order items from Fagor and include shipping information. Parts will be drop shipped from Fagor's Warehouse.

If the part is under warranty, Agency must provide Distributor with the authorization number given by Fagor, when placing order. Part will be shipped free of charge. Using that number Distributor will fill out the Warranty Parts Form and fax/e-mail it to Fagor at the end of the month .

If service agency owns a package of spare parts, it is his responsibility to maintain original quantity of parts in stock. Fagor will not pay second trips for service calls that involve these parts. Service Agency should have the package of spare parts in the van when is attending a service call.

3. INVOICING and SHIPPING of PARTS

Under Warranty, Distributor should send the part free of charge to the Service Agency. Distributor will be reimbursed for the part by Fagor or part will be replaced, as soon as the Warranty Parts Form is received.

4. SERVICE INVOICES

Service Agency will send the invoice to Fagor in order to be reimbursed, indicating the Authorization Number. No charge for the parts. Use Fagor Warranty Claim Form. CFESA service report Form also permitted.

5. DOCUMENTATION

Distributors and Agencies will be supplied with the following technical information and

documentation: Parts breakdown, Service Manuals, Schematics, Repair sheets and Parts Price List. For your convenience this information will be supplied on electronic format.

6. REASONABLE TIMES TO REPAIR AND REPLACE PARTS

- 1) From 30 to 45 minutes to diagnose a defective component and/or reason of the failure.
- 2) Replacement of parts:
 - From 15 to 20 minutes to replace:
 - Washing components, such as nozzles, retainers, arms, axles, pipes, etc.
 - Detergent pump.
 - Rinse aid dispenser.
 - External panels.
 - Water solenoid valve.
 - Vacuum breaker.
 - Capacitor.
 - Pressure switch.
 - Timer.
 - Contactors.
 - Relays.
 - Main selector switch.
 - Thermostats.
 - Heater located in the tank.
 - Cooler.
 - From 30 to 35 minutes to replace:
 - Heater located in the booster.
 - Door components.
 - Hood components.
 - Drain pump.
 - From 45 to 50 minutes to replace:
 - Washing pump.
 - 60 minutes to replace:
 - Booster.
 - Hood.
- 3) From 10 to 15 minutes to test and check out that the machine is repaired and working properly.



Fagor Commercial, Inc.

12800 NW 38th Ave

Miami, Fl. 33054-4525

Tel: (305) 779 0170

Fax: (305) 779 0173

1-866-GO-FAGOR

www.fagorcommercial.com