



DISHWASHER MANUAL

INSTALLATION AND MAINTENANCE

F-14

F-16DP

F-18DP

F-22



For operator. Do not discard.



Welcome to JET TECH

“Creating endless possibilities!”

This manual was created specifically for you, the end-user. We have included information to resolving some problems. General information pertaining to our hi-temp ware washers will be covered in this section. Specific information on our current models is available upon request, model by model.

If you find any discrepancy or can't find certain information, please contact us. We will be glad to be of assistance.

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MANUFACTURERS LIMITED WARRANTY

THIS WARRANTY COVERS THE FOLLOWING MODELS:
F-14, F-16DP, F-18DP, F-22, 727E, 737E, 747HH, 757E, 777, 787

MVP Group (JET TECH) hereby warrants all new ware-washers bearing the name “JET TECH” and installed within the continental United States of America or Canada to be free from defects in material or workmanship, under normal and regular usage and operation, for a period of one (1) year following the date of original installation, (unless specified otherwise) but in no event can exceed eighteen (18) months from the date of shipment from the factory.

If a defect in material(s) or workmanship is detected; or found to exist within the stated period above, MVP Group at its sole discretion, shall either repair or replace any part which has proven to fail within the machine; providing that the equipment has not been altered or tampered with in any manner, has been installed correctly as per the owner’s manual, and maintained and operated in complete accordance with this manual.

The labor cost to repair or replace any part proven to be defective, as per above clause(s), shall be covered by MVP Group, within the continental United States of America or Canada; provided that: prior authorization for this labor was approved by MVP Group, the service work was performed by an authorized service agency; and that this agency installed an original and genuine JET TECH part in the machine. Any repair work performed by a non-authorized service company remains the sole responsibility of the user, and MVP Group will not be held responsible. The installation of any generic part will not be valid; and therefore voids this warranty. All authorized labor coverage shall be limited to regular hourly rates only. Any supplemental hourly rates or charges, such as weekends or emergency premiums remain the responsibility of the user.

MVP Group hereby states that: warranty travel time shall be limited to, and without exception, a round-trip total of two (2) hours or mileage up to a maximum of one hundred (100) miles round-trip. Any charges exceeding those stated herein must have prior authorization by the factory.

Exceptions to above warranty are: (a) damages resulting from shipping, handling or abuse. (b) Incorrect installation and/or connections. (c) Unauthorized adjustments or calibration of any thermostats or timers. (d) Faults due to lack of regular maintenance or cleaning of any internal part(s). (e) Replacement of any wearable items such as: curtains, or peristaltic squeeze tubing or gaskets. (f) Excessive lime, mineral, alkali or hard water conditions and (g) poor results due to: use of an incorrect type of detergent (for non-commercial type applications or chlorinated), and excessive or inadequate water temperature or pressure conditions.

MVP Group states that there are no other warranties, expressed or implied, that are not set forth herein, MVP Group shall assume no other responsibility, either direct or non-direct, or be liable for any other or additional loss or damage whether being direct or consequential, as a result of its equipment.

Exceptions: Model F-14 - 90 days labor & one year parts.

The manufacturer reserves the rights to alter design and specifications without notice.

Technical Data

JET-TECH – Technical Data				
DESCRIPTION	F 14	F 16DP	F-18DP	F 22
voltage	120V 60 Hz	208-240V 60 Hz	208-240V 60 Hz	208-240V 60 Hz
Maximum absorption	1500 W	2770 W	4850 W	9950 W
Washing pump motor	100 W	370 W	750 W	930 W
Drain pump motor	n/a	100 W	100 W	n/a
Booster element	1400 W	2400 W	4000 W	9000 W
Tank element	1400 W	2000 W	2800 W	4000 W
Amp	13,5	12.9	23.5	47 (1ph) 27 (3ph)
HYDRAULICA DATA				
Solenoid valve capacity	10 l/minute	10 /minute	10 l/minute	10 l/minute
Booster capacity	0.53 us gal 2.0 litres	0.79 us gal 3 litres	1.85 US GAL 7 Litres	2.7 us gal 10.2 litres
Tank capacity	2.1 us gal 8 litres	3 us gal 11 litres	6.34 US GAL 24 L	4.75 us gal 18 litres
Water consumption x cycle	0.5 us gal 2,9 litres	0.53 us gal 2 litres	0.74 US GAL 2,8 L	1 us gal 3.8 litres
Water pressure	30 +/- PSI 2.07 BAR	30 +/- PSI 2.07 BAR	30 +/- PSI 2.07 BAR	30 +/- PSI 2.07 bar
Water connection	3/4"	3/4"	3/4"	3/4"
Water drain	1.1 inches 28 mm	1.1inch 28 mm	1.1inch 28 mm	1.5 inches 38 mm
DIMENSIONS				
High	23.825 inches 605 mm	29.75 inches 755 mm	33 inches 840 mm	81 inches 2060 mm
Length	19.75 inches 500 mm	20.25 inches 514 mm	23.62 inches 600 mm	39.25inches 996 mm
Deep	19.75 inches 500 mm	20.25 inches 514 mm	23.62 inches 600	30 inches 736 mm
Weight	72.5 lbs 33 Kg.	116 lbs 53 Kg.	150 lbs 68 Kg.	342 lbs 155 Kg.

Installation Guidelines

This commercial dishwashing machine must be installed by licensed technicians. All utilities must comply with local codes. If you need a list of qualified technicians, please call our office.



It is important to carefully unpack the machine and inspect as soon as it is received. Any damage must be reported immediately. All packing material should be well discarded. The plastic protective sheets covering the stainless must be removed. Do not use the wood pallet on which the unit was shipped as a stand. Taller legs and metal stands are available.



The unit must be installed on a hard, level surface or allow for easy levelling of the unit. Enough room should be allowed around the unit to allow for servicing. The units come equipped with hoses, ready to connect and install. The electrical wire (except for the F-14) needs to be supplied by the electrician and will be “hard-wired” on a dedicated circuit.

Some models are equipped with automatic drain pump.

The dishwasher must be installed on a non-combustible surface. Installation on hard-wood floor is forbidden.



All Panels must remain on the equipment when the installation is finished.

The unit can become very hot. Keep away from children.



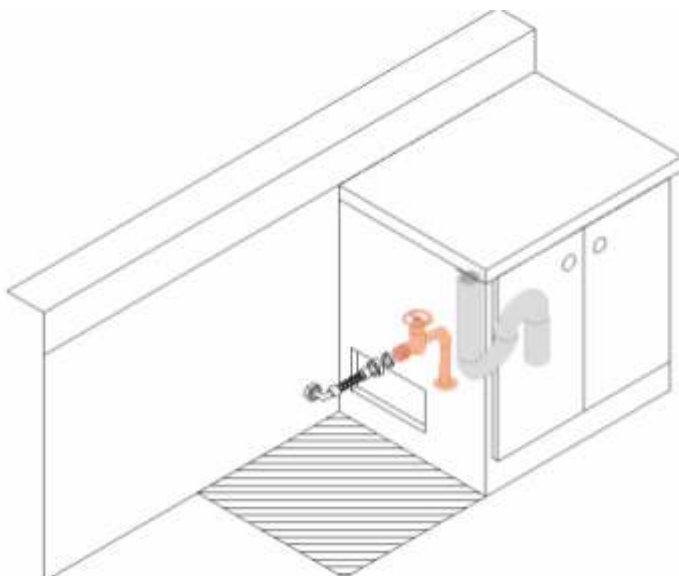
Using this unit will cause a small amount of water to spill on the floor when the basket is removed from the wash cabinet, making the floor slippery. The floor near the unit should have a non-slippery surface, or anti-skid.



A floor drain near the unit is recommended.

This instruction Manual must remain with the operator. The operator must read this manual.

This unit must be registered upon installation for the warranty. MVP Group will send a technician (some condition applies) free of charge to verify the unit and the installation.



Removing Panels

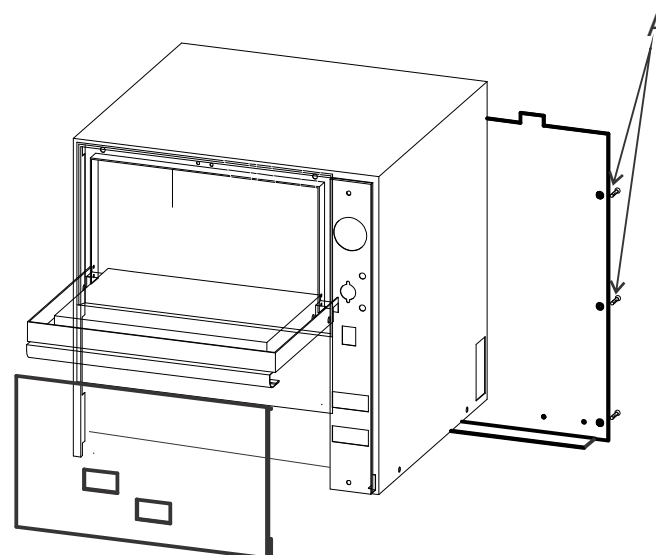
In order to get access to some of the component for the installation, some of the panels need to be removed from the machine. It is important to pay attention on the assembly aspect of the machine. The panels **must be replaced** exactly once the job is completed.

IMPORTANT NOTE: IF THE MACHINE IS ALREADY CONNECTED TO POWER OR WATER, make sure that both the power and the water is shut off before the panels are removed.



F-14

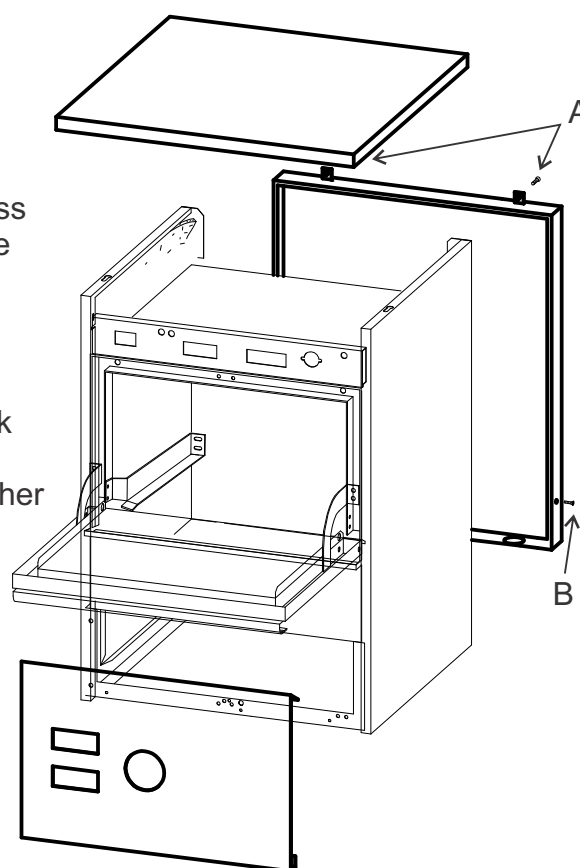
On the F-14, the rear panel can removed by taken out the six phillips screws(A). The front panel can be removed by prying it out. Insert a flat tool on the edge of the panel and pry out.



F-16DP

Only the front bottom panel needs to be removed to access the chemical pumps. Should it be necessary to access the inside of the machine, the panels should be removed in a specific sequence.

- 1) using a phillips screw driver, remove the two screws located at the back of the top panel (A).
- 2) Once removed, the panel should slide towards the back and pull up.
- 3) the rear panel is held by two phillips screws, one on either side (B).
- 4) the panel must be lifted up and pull away.



Removing Panels

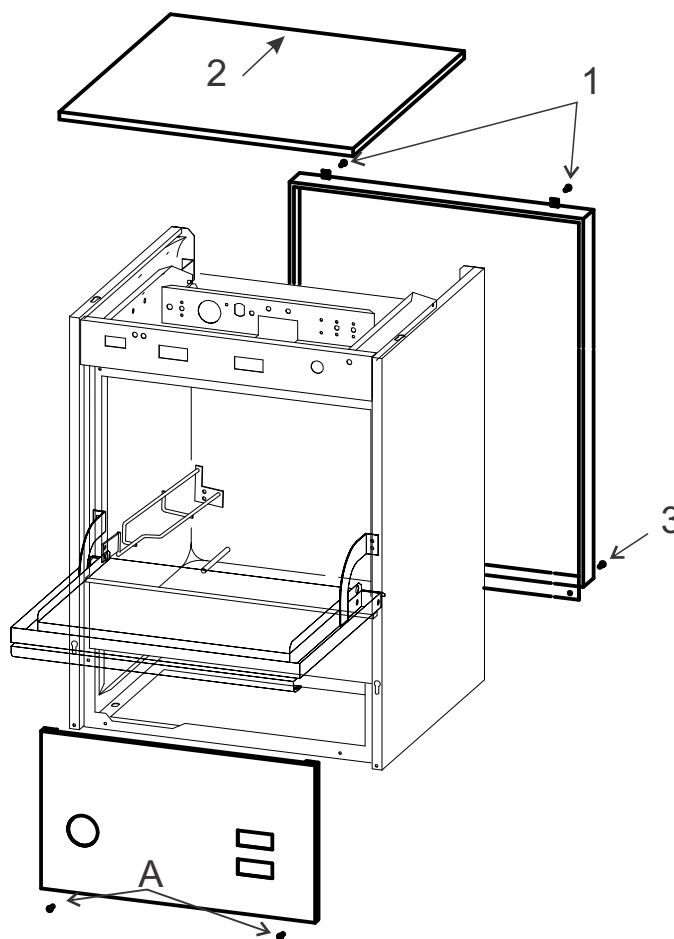
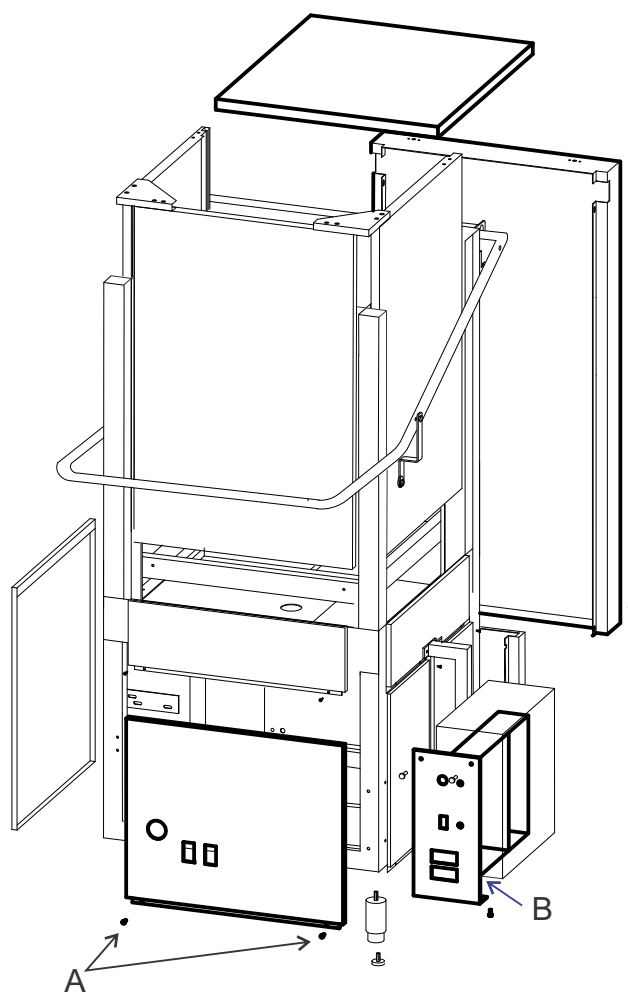
cont.

F-18DP

A) The front bottom panel needs to be removed to access the chemical pumps.

To connect the electrical wire it will be necessary to access the inside of the machine. The panels should be removed in a specific sequence.

- 1) using a phillips screw driver, remove the two screws located at the back of the top panel.
- 2) Once removed, the panel should slide towards the back and pulled up.
- 3) the rear panel is held by three phillips screws, at the bottom of the panel.
- 4) the panel must be lifted up and pull away.



F-22

A) The front bottom panel needs to be removed to access the chemical pumps.

To connect the electrical wire it will be necessary to access the inside of the machine. The connection is made in the control panel situated on the right side of the machine. four (4) phillips screws need to be removed to access it. The panel will slide as a drawer (B). Pull gently on the bottom edge of the panel. The drawer should extend about 20 centimeter (8 inches).

ELECTRICAL

- Referring to the local electrical code, wires must be large enough to carry the electrical load used by the dishwasher. The electrical breaker must be large enough to protect those wires. Normally the breaker size or fuse size should not exceed %110 of total current load (ex.: 23 amps requires max fuse size of 25 amps).

- All units must be grounded.

- Except for the F14(110 volts), all the high-temp dishwashers do NOT require a neutral.

- For tri-phase model, three live wire are required and the rotation of the pump(s) must be verified.

-Only a licensed electrician can make sure the unit is installed with the proper set-up, according to local codes.

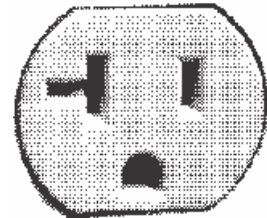


F-14

120 volts, 60hz, 13.5 amps

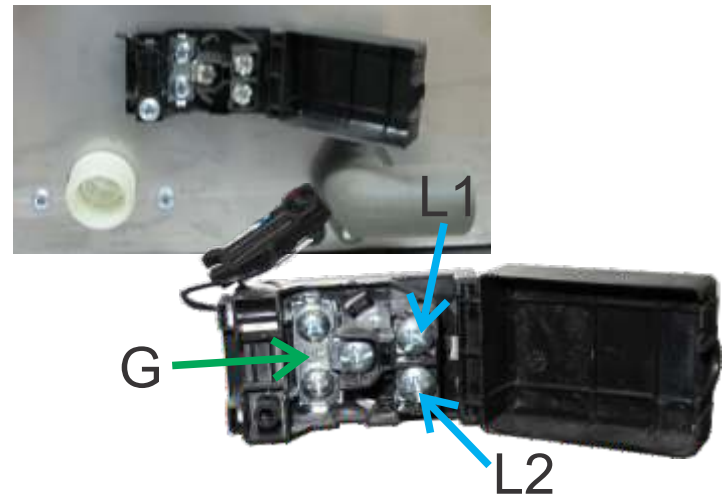
(power cord with NEMA 5-20 plug included)

The Outlet (5-20) should be a maximum of 4 feet (1,2 m) from the machine on a dedicated circuit.



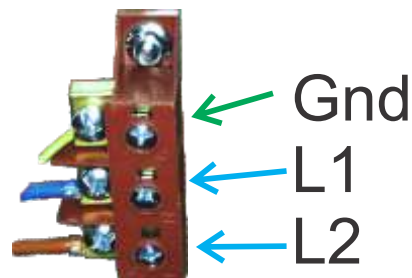
F-16DP

208 to 240 volts, single phase (no neutral) 60hz, 12.9 amps. The terminal block connector is located behind the unit next to the water inlet valve and the drain connection



F-18DP

208 to 240 volts, single phase (no neutral) 60hz, 23.5 amps. The electrical terminal block is located inside the unit, in the back, on the right side (viewed from the front), behind the rear panel. Both top and rear panels must be removed.

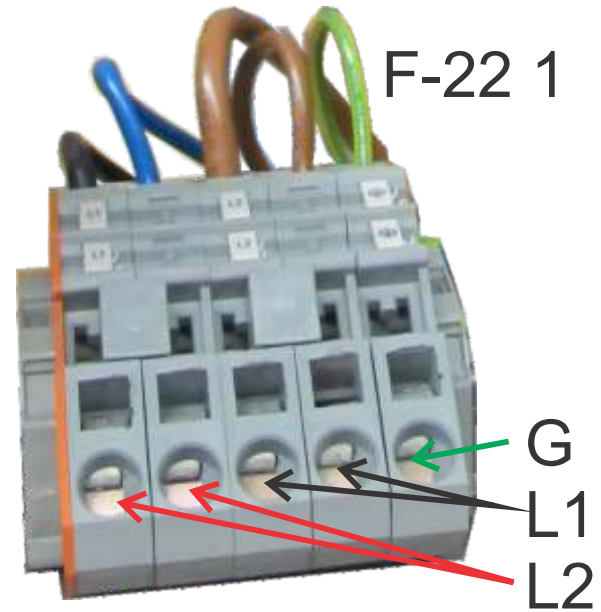
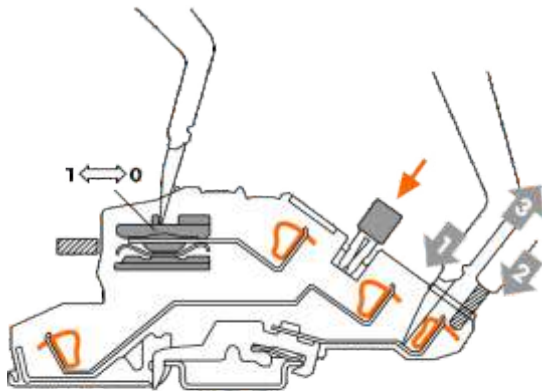


ELECTRICAL (Cont.)

F-22

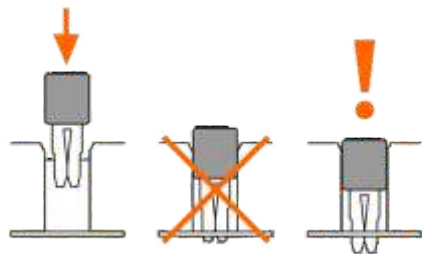
208 to 240 volts, single or three phase (no neutral) , 60 hz. The model on three phase can not be connected or converted to single phase. The electrical connection is made on the terminal block located in the control panel, to the right of the machine.

To connect a wire in the electrical block, ① a small flat screw-driver will be inserted in the square hole. With the screw-driver, you will push down the internal tab, allowing to insert the bare portion of the wire ②. Once the wire inserted, ③ you will pull out the screw-driver. To make sure the wire is inserted properly, you will pull gently on the wire.

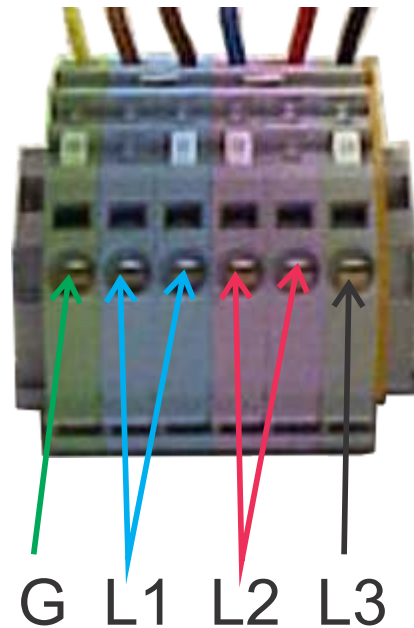
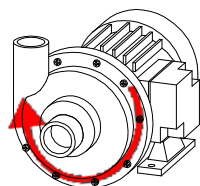


F-22 1

F-22 3

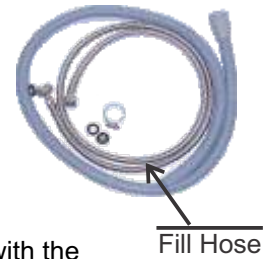


IMPORTANT!
Verify motor rotation on 3 phase unit.



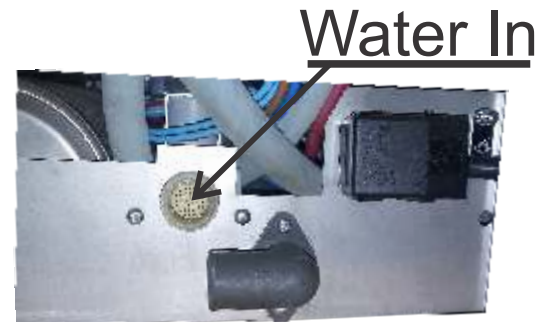
WATER SUPPLY

- Water supply must be 140° F (60°C) at all time.
 - If water temperature is 130°F or less, the unit will not meet NSF standards and the dishwasher must be allowed an extra two (2) minutes between washes cycles.
 - Running pressure must not exceed 30 PSI (15 PSI on the gauge). A Pressure Regulating Valve maybe required.
 - Water should be free of minerals and other sediments.
 - Hook-up is made with ¾ NPT. It is recommended to use the metal braided reinforced hose supplied with the machine.
 - If a hot water tank has to be installed to supply the dishwasher, the average rate of water consumption is 30 gallons per hour (110 Litres/hour).
 - A water shut-off valve is required near the machine (3 feet, or 1 meter).
 - Make sure to tighten your water connections snugly to prevent leaks from developing, but do not over tighten.
- NOTE: Do not rely on the pressure gauge on the machine. This pressure gauge shows internal pressure only. It will show a pressure of about 15 PSI if 30 PSI is applied to the machine.



F-14

Water connection is 3/4 NPT. A flexible fill hose is supplied with this unit. Needs 30 PSI (2 Bar), 140°F (60°C). The water connection is located at the rear of the machine, behind the stainless steel panel. The hose can either come out the left or right side. The pressure gauge on the machine should show 15 PSI during flow.



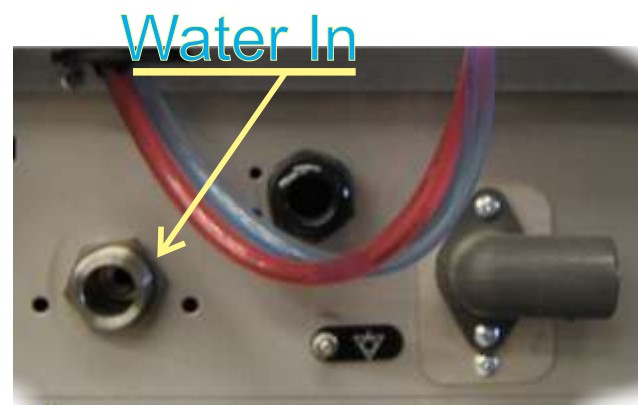
F-16DP

Water connection is 3/4 NPT. A flexible fill hose is supplied with this unit. Needs 30 PSI (2 Bar), 140°F (60°C). The water connection is located at the rear of the machine. The hose can either go to the left or right side of the machine. The pressure gauge on the machine should show 15 PSI during flow.



F-18DP

Water connection is 3/4 NPT. A flexible fill hose is supplied with this unit. Needs 30 PSI (2 Bar), 140°F (60°C). The water connection is located at the rear of the machine. The hose can either go to the left or right side of the machine. The pressure gauge on the machine should show 15 PSI during flow.



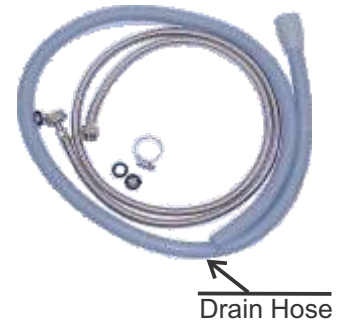
F-22

Water connection is 3/4 NPT. A flexible fill hose is supplied with this unit. Needs 30 PSI (2 Bar), 140°F (60°C). The water connection is located inside of the machine, at the base, next to the wash-pump. The flexible hose will come out the back of the machine. The pressure gauge on the machine should show 15 PSI during flow.



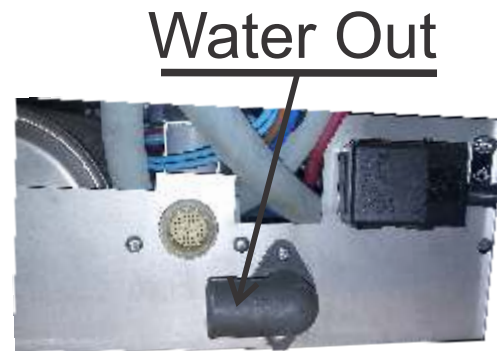
DRAIN CONNECTION

- If the unit uses a gravity drain, it has to drain in an open floor drain.
- The drain hose to be used can not be allowed to collapsed.
- Do not reduce more than one pipe size.
- Follow local codes for proper waste disposal.
- Allow for easy removal for cleaning and servicing. Use flexible hose. Hard plumbing the unit is strongly discouraged, and can result in extra expenses for the user.
- If the drain is more than a few feet from the machine, it is recommended to have a proper down flow angle. For unit equipped with a drain pump, the hose should come up behind the unit and than flow down.



F-14

The drain connection is 1 inch (27mm). A flexible drain hose is supplied with this unit. This unit is gravity drained. The machine must be higher than the drain. The drain connection is located at the rear of the machine, behind the stainless steel panel. The hose should come out the left side.



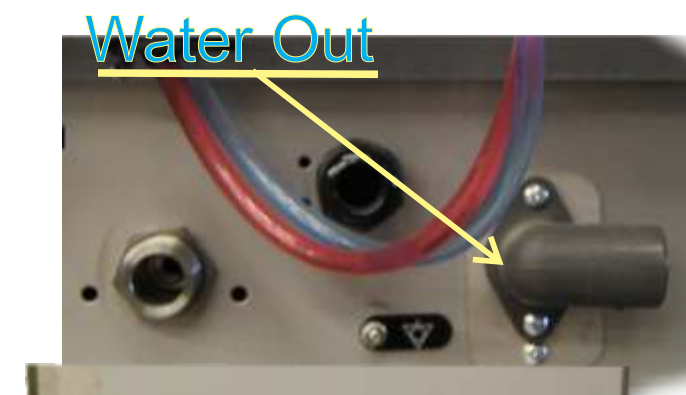
F-16DP

The drain connection is 1 inch (27mm). A flexible drain hose is supplied with this unit. This unit is equipped with a drain pump. The drain connection is located at the rear of the machine. The hose should go to the right side of the machine.



F-18DP

The drain connection is 1 inch (27mm). A flexible drain hose is supplied with this unit. This unit is equipped with a drain pump. The drain connection is located at the rear of the machine. The hose should go to the right side of the machine.



F-22

The drain connection is 1¼ inch (33 mm) A flexible fill hose is supplied with this unit. This unit is gravity drained. The drain connection should be lower than the output of the machine and going to an open floor drain. The drain connection is located outside of the machine, at the rear.



CHEMICALS AND CHEMICAL DISPENSERS

All models are equipped with factory installed liquid detergent and rinse-aid pumps which automatically dispense during the rinse/fill cycle. They are located in the base of the machine. Calibration may be necessary for certain area but is not covered by warranty. These pumps can not be substituted. Other dispensers can not be installed on these models as it will void the warranty.

Before accessing the bottom section of the machine, please ensure that the main power has been disconnected at the source (breaker panel). The front panel must be removed.

The red (detergent) and blue (rinse-aid) tubes connected to the pumps must be untied and pulled free. The filters at the end of the hoses are placed inside the chemical containers.

DETERGENT PUMP ADJUSTMENT AND PRIMING

The detergent pump automatically injects detergent into the wash water every cycle during the rinse cycle.

The detergent pump is located in the base of the machine.

The quantity of liquid detergent dispensed per cycle can be regulated by turning the Adjusting Screw clockwise to increase or counterclockwise to decrease (see photo below). The pump operates during the fill cycle and rinse cycle.

To prime the pump, the dishwasher must be empty of water. Turn off the water valve. Close the door and turn the machine on. You will see the detergent being drawn up the tube as the dishwasher tries to fill. Once the detergent has passed through the pump, turn off the machine, open the water valve, replace the overflow tube and turn on the machine again. The machine should start filling normally.

NOTE: Be sure to replace the bottom panel when finished.

RINSE PUMP ADJUSTMENT AND PRIMING

The rinse pump automatically injects rinse additive into the rinse water for the final rinse to assist in the drying of the plates and glassware without spotting or streaks.

The rinse pump is located in the base of the machine, beside the detergent pump. Access to the rinse pump and adjustments are made in the same manner as the detergent pump (above). Place the tube and filter into your rinse-aid container.

WHAT TO USE:

DETERGENT: A Sodium Hydroxide or Potassium Hydroxide for the detergent. A commercial type, non-foaming detergent is recommended. DO NOT use a domestic-type dish soap or chlorinated, or a detergent that contains chlorine. Using too much soap may cause damage to the pump seals.

RINSE-AID: A Surfactant Isopropanol for the rinse is recommended.

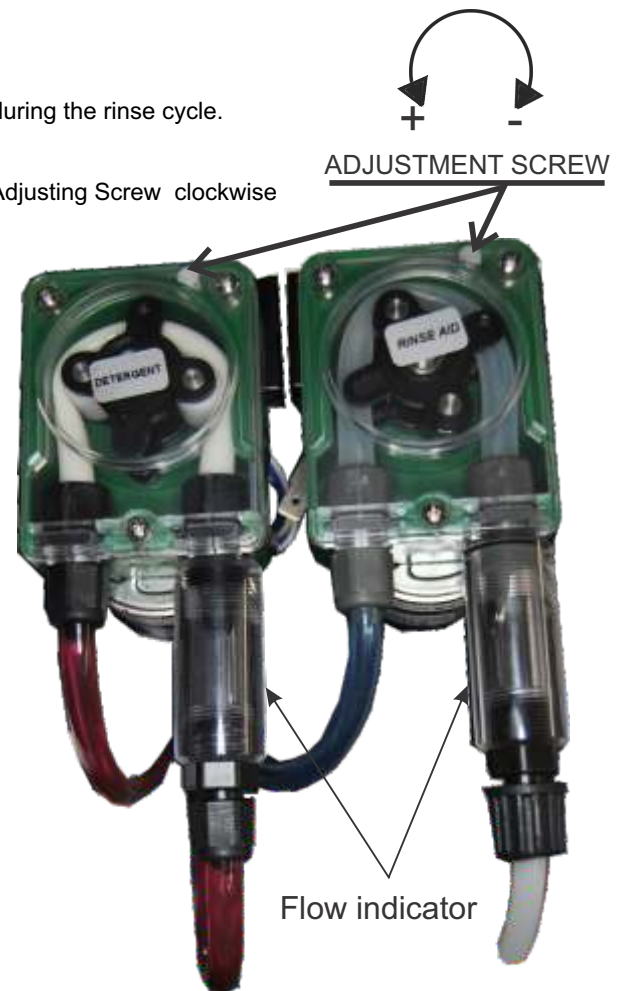
Quantities will vary with water quality but as a guideline there should be 200 ppm (pH 11) for the detergent and 50 ppm for the rinse-agent. These products are available from your chemical supplier.

DO NOT use a sanitizer (chlorinated products, bleach) as this will void the warranty.

For additional questions concerning installation. Please contact our customer service department.

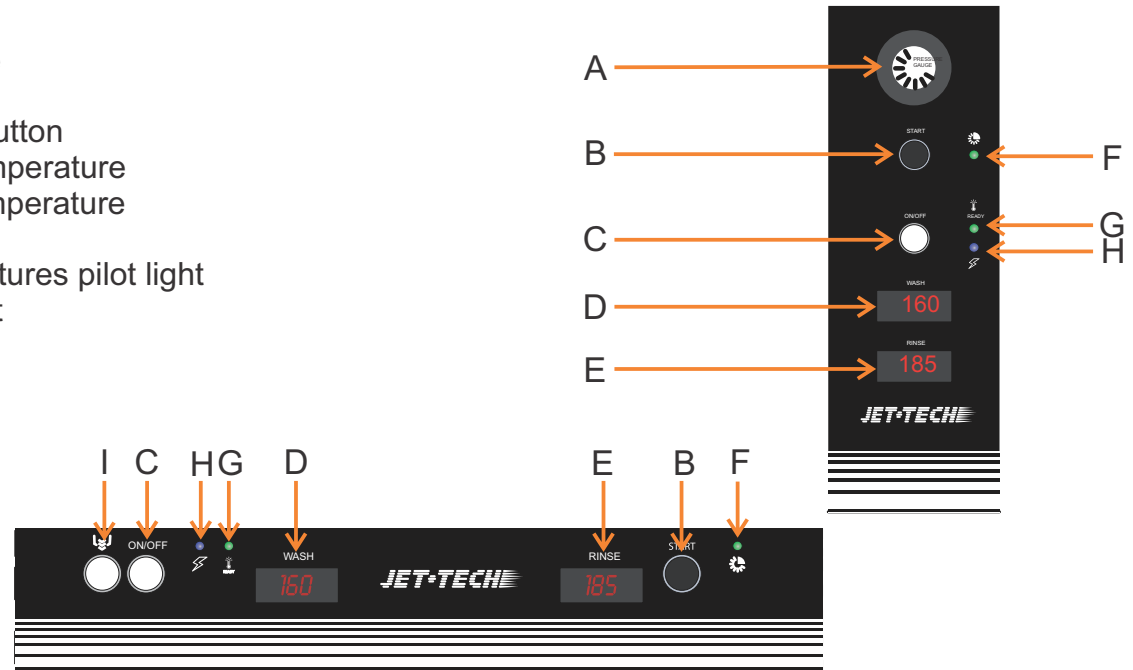
IMPORTANT

Use caution when handling chemicals and always follow the supplier's instructions carefully.



CONTROL PANEL

- A: Pressure gauge
- B: Start button
- C: Power switch button
- D: Wash water temperature
- E: Rinse water temperature
- F: Cycle pilot light
- G: Ready temperatures pilot light
- H: Power pilot light
- I: Drain button



BASIC STEPS TO START

Begin with an empty dishwasher, no water in the wash tank. It is easier to start this way. Make sure the screens and the overflow pipe are in place. Close the door.

Push the round grey button (C). The dishwasher will take about two minutes to fill and 20 minutes to heat up the water. Do not open the door during fill, water will spray out.

The booster will heat up first and then the wash tank will heat up.

When the dishwasher is ready, the ready light will come on (G). This indicates that the dishwasher has reached maximum temperatures.

You can now start washing.

Fill the basket with dishes.

Slide it in to the dishwasher.

Close the door and press the round grey button(B). The dishwasher will start washing for a few minutes and then will rinse for about half a minute.

When the cycle light (F) goes off, open the door and remove the tray to let air dry.

You're ready for another wash. You do not have to wait for the ready light to light again (G). As long as the temperatures are within parameters (150°F to 165°F for wash and 180°F to 190°F for rinse), it is okay to wash.

You should drain the dishwasher at least once a day, and the dishwasher should be turned off and left empty of water at night.

To drain the dishwasher, follow these simple steps;

Turn Off the power.

Open the door, reach in and pull the overflow tube out(water may be hot). Water will drain out like a sink.

For machine equipped with a drain pump, press and hold the gray drain button (I) until all the water is gone. Be careful not to let any dirt go down the drain as it may block the pump.

TROUBLESHOOTING

PROBLEM	CHECK	ACTION
The unit fills constantly	Machine had been turned off for several hours without having drained the water from the wash tank.	Turn the machine OFF. Remove the overflow pipe and drain the unit completely. Once drained, clean wash tank and filters. Replace all parts removed for cleaning. Close door, turn the machine ON and let fill.
	Overflow pipe in wash tank may not be properly positioned .	Overflow pipe should drop straight down into the drain receptacle. Do not force.
	The water level system may be defective.	Call for service
Warewasher fills in less than 1 minute	Incoming water pressure is probably too high (above 3 BAR flow).	If the water pressure above 3 BAR, a Pressure Reducing Valve must be installed.
	The water level may be low because the air trap has dirt in it.	Clean the air trap by pouring water over it.
Warewasher fills in more than 3 minutes	Incoming water pressure may be incorrect.	The unit requires a minimum incoming water pressure of 2 BAR. Check that shut-off valve fully opened. If incoming pressure is still low, a pressure-booster pump to increase the water pressure may be required.
	Water may be leaking down the drain.	Remove and reposition the overflow pipe.
The Unit Will Not Operate or Start	The Power ON Indicator Lamp is off.	Verify the breaker and all electrical connections.
	The Power ON Indicator Lamp is on.	Verify that the water supply is turned on.
Unit Makes a High Pitch Noise (during the wash cycle)	Too much detergent in the wash tank will cause the wash pump to make a high pitch noise.	Reduce the amount of detergent. Drain the unit, refill and do a wash cycle. If the squealing continues, call for service.
Spotting Or Streaks Appear On Wares	Rinse Pump needs to be primed or adjusted.	Prime and/or adjust.

TROUBLESHOOTING

PROBLEM	CHECK	ACTION
Dishes are not clean	Verify that the scrap screens are clean.	Clean the scrap screens. Do not forget the wash pump filter .
	Check to see if the wash/rinse arm jets are clogged.	Clean the jets/nozzles. Be careful not to lose the o-rings.
	Detergent system may be blocked or defective.	The detergent filter in the container may be clogged. Rinse under water. Check the detergent tube for deposits. Clean the line if necessary. Peristaltic hose(s) will have to be replaced periodically as regular maintenance. Check for cracks or leaks.
	Missing Detergent	Replace the containers
	Verify incoming water pressure.	The unit requires a minimum incoming water pressure of 2 BAR. Check that shut-off valve fully opened. If incoming pressure is still low, a pressure-booster pump to increase the water pressure may be required. If the water pressure above 3 BAR, a Pressure Reducing Valve must be installed.
	Verify the water level in the wash tank correct.	Water level should be just under the opening of the overflow pipe.
Warewasher overflows	Drain outlet hose may be kinked or blocked.	Straighten or unblock hose.
	Drain pump may be blocked or defective.	Call for service. Food or debris in the drain pump is not a warranty issue.
	Incoming water pressure may be too high.	If the water pressure above 3 BAR, a Pressure Reducing Valve must be installed.
	Non-commercial foaming type detergent may have been introduced to the wash tank and is causing excessive suds.	Turn off the washer and drain the washtank. Remove as much suds as possible. Do not replace overflow pipe. Close the door and turn the power on. Let unit run for 2 to 4 minutes. Turn off unit, replace overflow pipe, close the door and refill unit. Try washing. If the problem reoccurs, repeat above procedure.

TROUBLESHOOTING

PROBLEM	CHECK	ACTION
Wash Pump Not Operating Consistently	Machine has not been levelled.	Level the unit with the four (4) adjustable feet.
	Water level in the washtank may be too low (below the level of the screens).	Turn the machine OFF. Remove the overflow pipe and drain the unit completely . Once drained, pour hot water over air trap. Close door, turn the machine ON and let fill. Water level should be even with the screens. Call for service
Drain Time Exceeds 2 Minutes	Drain hose may be kinked or drain is blocked. Drain Pump may be blocked and/or defective.	Unclog or reposition hose, and/or replace the drain hose. Unclog or replace drain pump, as required. Call for service

Maintenance

I. Daily:

- A. Empty dishwasher.
- B. Clean the basket.
- C. Clean all screens.
- D. Clean the wash tank. Do not use any abrasives for washing the tank. Do not wash or rinse with a hose.
- E. Verify chemical levels in each containers

II. Weekly:

- A. Clean wash-arm jets by unscrewing them. Remove the wash-arm by unscrewing the center knob.
- B. Visually inspect the chemical pump for broken tubes. Turn off the power to the machine. Open the front panel with a screw driver.
- C. Use of descaler may be required.

III. Monthly:

- A. Visually inspect inside the machine for any water or chemical leaks.

V. Annual

- A. A complete verification by a qualified technician is recommended.

IMPORTANT NOTES

Locate and clearly identify the water shut-off valve that supplies the dishwasher and the fuse box or breaker switches.



Only qualified and/or licensed technician can repair this piece of equipment. Removing panels expose wires and live current. Breaker switch should be switched off or fuses removed before removing the panels. Water supply must also be turned off. Don't expose yourself to severe injuries needlessly. Call a tech.



CONTACT INFORMATION

Do you have any questions?
Do you need service?

MODEL: _____
SERIAL: _____
DATE INSTALLED: _____

SERVICE:



5659 Royalmount Ave.
Montreal, QC H4P2P9 CANADA
Telephone: (514) 737-9701
Toll Free Telephone: 1-888-275-4538
Fax: (514) 342-3854

3560 NW 56th St.
Fort Lauderdale, FL 33309 USA
Telephone: (786) 600-4687
Toll Free Telephone: 1-844-218-8477
Fax: (786) 661-4100
Email: service@mvpgroupcorp.com

For service call 1-888-275-4538



