

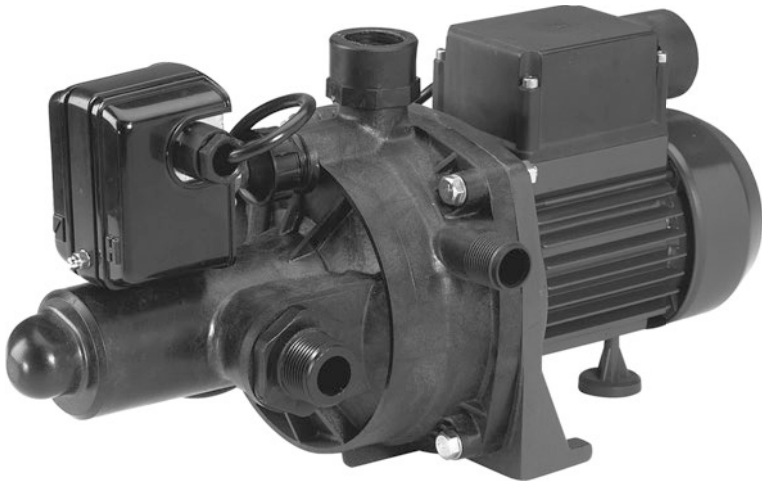
OWNER'S MANUAL



RIVA-FLO®

MF55

GENERAL PURPOSE
PRESSURE SYSTEM



Should the installer or owner be unfamiliar with the correct installation or operation of this type of equipment, contact the distributor or manufacturer for correct advice before proceeding with installation or operation of the product

OPERATION

Please read these instructions in full before installing and commissioning the pump unit.

PUMP PROTECTION

Pump Protection: Warranty of this pump is void unless they are housed correctly and protected from weather, floods, chemicals, dust, vermin, insects etc. The housing used should be weather proof and well vented so that motor heat can escape. To obtain best performance, pumps should be installed as close to water supply as possible. It is recommended that the pump unit is bolted down.

FLUID PUMPED

Pumps are manufactured to pump water found in defined applications. Special pumps are made to pump chemicals, septic tank effluent, sewerage, swimming pool, spa, hot water, high viscosity, dirty water and large or stringy particles.

Care should be taken that pumps are not used to pump fluids beyond their design criteria or they will fail or operate unreliably.
Recommended Water Temperature Limits °C.

Model	Min.	Max.
MF	5	60

If in doubt seek advice from an experienced pump engineer.

CONNECTING PIPES

Pumps can be damaged if care is not taken when connecting pipes. Pipes should be supported so that the pump casing is not strained by the weight or misalignment.

Pipe fittings should be carefully screwed onto the pump making sure not to cross-thread or overtighten. We recommend the use of a moulded pipe fitting to connect to the pump as this avoids possible damage to the pump threads and unnecessary replacement of parts.

PRIMING

Prime the pump through the top female outlet so that the pump and suction line are full and then install RF pressure tank. Turn pump on and allow to operate until primed and all air is flushed out of suction and discharge lines.

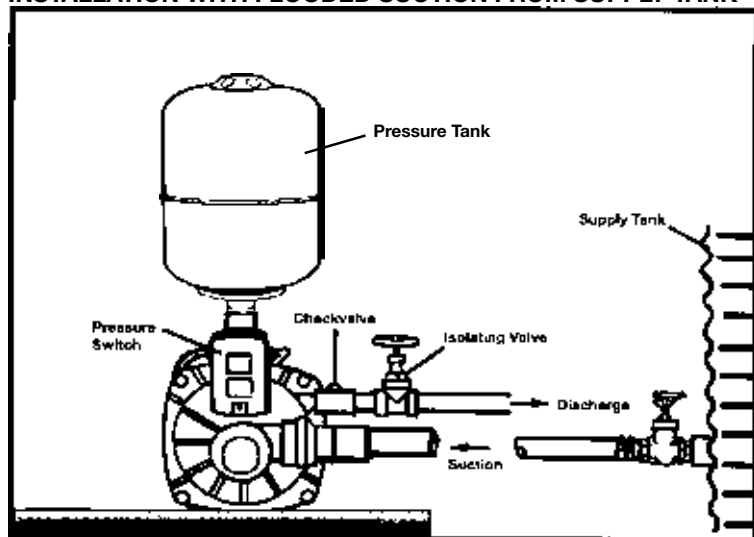
The MF55 pump has a 25mm (1" BSP) male suction port which includes a built-in non return valve. For best performance install pump as near to water as possible using 25mm or larger pipe. If the pump is required to lift the water in a long suction line, remove the built-in non return valve from pump suction and install a footvalve at the end of the suction pipe.

The MF55 pump has a 25mm (1" BSP) male outlet and is positioned adjacent to the inlet port. A Riva-flo pressure tank with a 1" male fitting will assemble directly into this outlet.

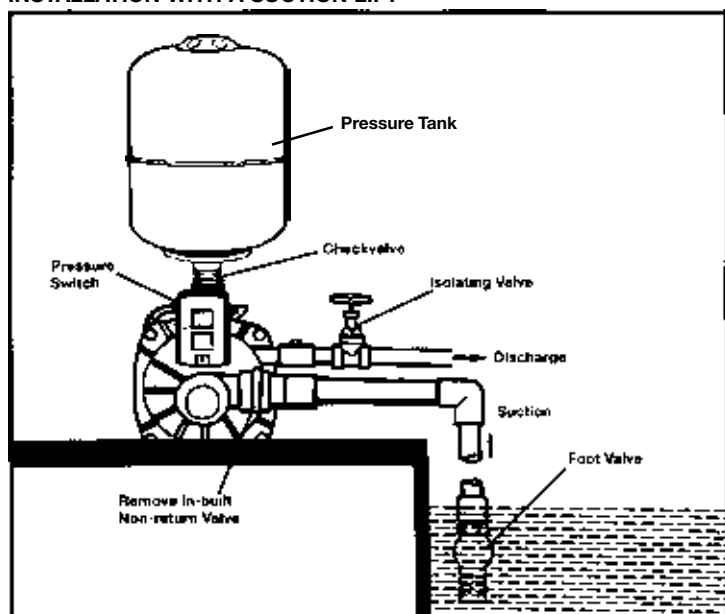
The pressure switch should be screwed into the port on the front of the pump casing. No sealing tape should be necessary and the locknut should only need be just over handtight to seal.

All pressure switches are factory set and will suit most domestic requirements, but minor adjustment may be necessary to suit individual installations.

INSTALLATION WITH FLOODED SUCTION FROM SUPPLY TANK



INSTALLATION WITH A SUCTION LIFT



TROUBLE SHOOTING

FAULT	REMEDY
1. Priming Trouble	<ul style="list-style-type: none"> • Foot or check valve may be leaking. • Foot valve should be installed below actual drawdown water level. • Suction lift too high. • Air leak in suction pipe. • Check valve may be installed in wrong direction. • Voltage or wiring of motor maybe incorrect
2. Motor Switching On and Off When No Water is Being Used	<ul style="list-style-type: none"> • Pressure switch setting incorrect - check catalogue. • Pressure tank filled with water - no air cushion. Recharge to instruction on pressure tank. If pressure tank loses pressure after a short period of operation, then check pressure tank and air valve for leaks, replace pressure tank bladder if necessary. • Foot or check valve leaking. • Discharge or suction pipe or pipe fittings leaking.
3. Pump Not Switching Off or Taking Too Long to Switch Off	<ul style="list-style-type: none"> • Low line voltage. • Drop in suction water level. • A leak on discharge side of pump. • Blocked impeller or jet. <p>To correct for a drop in voltage and/or water level, adjust top pressure switch setting about 35kPa (5 psi) below pump top pressure to compensate the differential change.</p>
4. Motor Thermal Overload Tripping	<ul style="list-style-type: none"> • Motor operating on low pressure. • A blocked impeller causing it to rub. • Waterlogged Aqua Pack. To cure see "Motor Switching On and Off" (2.) above.
5. Pump runs but fails to operate	<ul style="list-style-type: none"> • The pump has probably lost prime. • Check for an air leak in the suction pipe. • Foot or check valve leaking making priming difficult. • Pump and suction pipe may not have been filled with water. Pump impeller, suction pipe, or foot valve clogged. • No water in the tank or water source.

ELECTRICAL

All single phase systems are supplied with a standard Australian (3) three pin plug and cord for connecting to 230 volt power outlets. 10 amp plugs are used. No 3 x phase models available.

ELECTRICAL TROUBLE SHOOTING PROCEDURE

No electrical power, electrical fuse blown, pump not plugged in, voltage incorrect. etc.

If the motor thermal repeatedly trips there is a fault which should be corrected before major problems occur.

- Simple initial inspection may show cause of jammed or fouled impeller which if not corrected will result in motor burnt out.

Automatic Reset: This automatically resets as the motor cools.



BEWARE: Pump may restart without warning

PRESSURE TANK INSTALLATION

Pressure tanks must be charged with air before installation. The air pressure should be 10% lower than the pressure switch cut-in setting of the pump, (e.g. pump working on 140-280 kpa should have a tank air charge of 125kPa).

Pressure tanks should be installed under cover out of the weather and the air pressure should be regularly checked and maintained.

PRESSURE TANK MAINTENANCE & TROUBLE SHOOTING

(Auto Operation)

The air charge should be checked at least once a year as tanks gradually lose air which causes pump cycling.

To check air pressure, turn off the electricity to the pump.

Turn off the gate valve from the water supply.

Turn on a tap so that the water is drained from the pump.

Only then, measure the air pressure in the tank using a tyre pressure gauge on the valve. If the pressure is low, recharge using a tyre pump.

Do not over charge the tank with air as this will cause tank liner damage, pressure surge problems, and the system to malfunction.

False readings can be obtained when checking the air pressure unless the tank is completely empty of water.

If in doubt unscrew or disconnect the tank from the pipe work. When the air pressure is correct, reinstall the tank, open gate valve from the supply tank and turn on the electricity. The pump should now operate normally once any air is purged from the lines and pressure switch adjusted accordingly.

For further information on the installation of a pressure system, refer to the installation and operation instructions supplied with the pressure kit.

SAFETY HINTS

BEWARE:

- Pump may restart without warning if motor features include an automatic overload. Refer “Electrical Trouble Shooting Procedure”.
- **DO NOT** over charge the air pressure within the pressure tank where installed. Refer “Pressure Tank Installation” for correct air pressure setting procedure.
- If a domestic pressure system is installed near a mains pressure hot water service, a checkvalve should be installed on the discharge line of the pump to prevent hot water leakage back to the pump should the hot water service’s non return valve fail. Pump protection can be achieved by installing a checkvalve between the discharge side of the pump and the hot water service at a distance so as heat transfer cannot effect the pumps casing.
- Pumps are electrically operated and must be kept dry out of wet or damp conditions. Motor vent holes should not be touched as rotating parts may cause injury.
- Always turn the **POWER OFF** and pull out the power plug if doing repairs or adjustments to the pump.

IMPORTANT

Please attach your sales invoice/docket here as proof of purchase should warranty service be required.

Please do not return Warranty - Retain for your records.

Purchased From

Purchase Date..... Serial No..... Model No.....



1-21 Monash Drive,
Dandenong South, Vic 3175

Australia

National Customer Service: Phone: 1300 137 344
Fax: 1800 006 688
National Dealer Locator: Phone: 1800 664 266
Email: au.sales@pentair.com
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New Zealand

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