

# Fuel Polishing Module

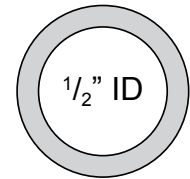


## Technical Specifications

|                    |                             |
|--------------------|-----------------------------|
| Flow Rate          | 126 GPH / 477 LPH           |
| Inlet / Outlet     | 1/2" Male JIC               |
| Voltage Available  | 12V or 24V                  |
| Max. Work Pressure | 58 psi / 4 bar              |
| Max. Suction Lift  | 10 ft / 3 m with foot valve |
| Self-Priming       | 4.9 ft / 1.5 m (wet gears)  |
| Pump Type          | Gear                        |
| Timer              | Programmable digital        |

## Piping Installation

System can be installed on the suction or discharge side of the filter. Use quality approved fuel line materials with at least 1/2" inner diameter line. Smaller plumbing will place excessive load on the motor and shorten its life.



If the unit is mounted below tank top level, a priming tee should be installed on the highest point of the suction line to be able to easily prime the systems delivery line. The return line(s) (discharge) should be connected to the outlet of the pump "OUT" port and enter the tank as far as possible from the pick up tube. For optimal performance, ensure that the outlet, discharge or return, line(s) are free and nothing is restricting their flow.

## Alarms

When the vacuum/pressure switch is triggered:

1. Alarm indicator lights up red
2. Buzzer activates
3. Pump shuts down

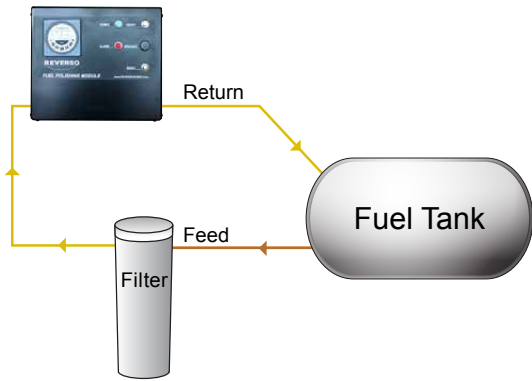
You will need to:

1. Service the filter.
2. Press the reset button to resume operation.

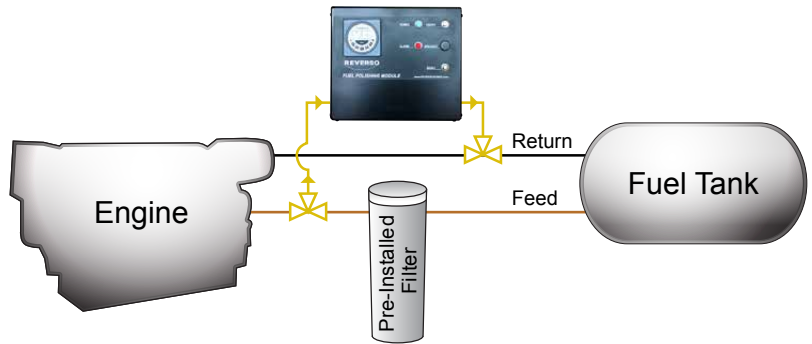
## Warning

- The gear pump is capable of developing extremely high pressure. Care must be taken not to operate the pump with either the suction (inlet) or discharge (outlet) lines closed.
- If the pump is allowed to run dry without fuel, pump damage could occur.
- The unit has been developed to be used with diesel fuel only. **DO NOT USE WITH GASOLINE.**
- When using additives be sure they are alcohol free and compatible with the unit seals.
- The unit is designed to meet environmental standards for safe operation (NOT for use with fluids that have a flash point below 100°F (38°C), e. g.: Gasoline, alcohol,...)

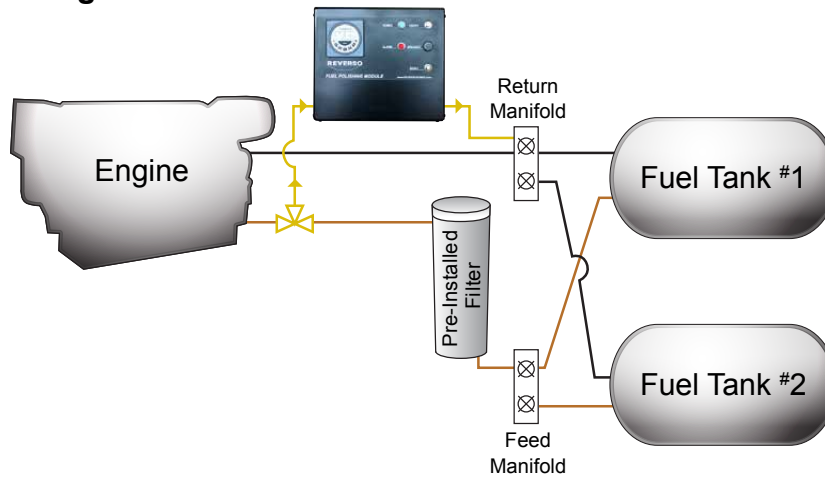
Single Tank



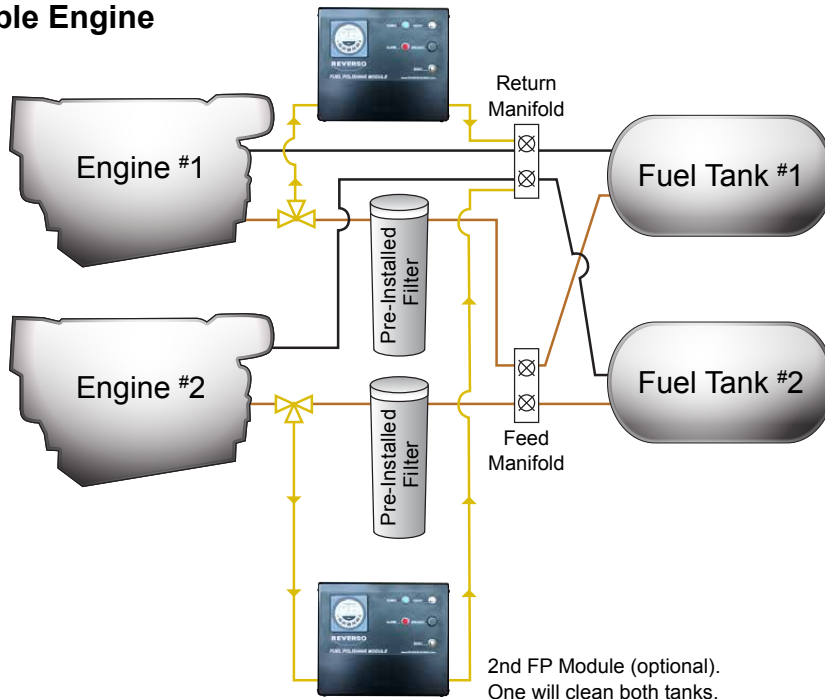
Single Tank / Single Engine



Double Tank / Single Engine



Double Tank / Double Engine



1

### Set Current Date and Time

Press and hold CLOCK key. Press DAY key until current day is displayed. Repeat using HOUR and MIN key to set the time. Release CLOCK key.



2

### Set Programs

Press TIMER key. "1 ON" will appear in the left of screen. This is the first program that you want the device to turn on.



3

Press DAY key to select the day(s) you would like this program to run. There are 15 different choices. When the one you require is displayed, stop pressing the DAY key. Press HOUR key to set the hour. Press the MIN key to set the minute.



4

Press TIMER key; "1 OFF" is displayed in the left of the screen. Follow the instructions in the previous step to set the desired days and times you want Program 1 to turn off.



5

Press TIMER key again to now set the second program you want the device to run. "2 ON" will appear in the left of the screen. Repeat the same procedure to set as many of the 8 programs as you would like.



6

Press TIMER key to advance the display and view each on and off setting. Double check the dates and times displayed. To make any changes, follow the previous steps.

When finished, press CLOCK key and timer will start to execute programs.

7

### Manual Operation

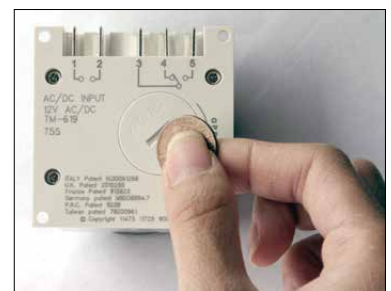
The line above ON/AUTO/OFF indicates which mode is operating. Press the MANUAL key to select ON/AUTO/OFF mode. ON mode will turn the device on. The red ON indicator light will be on if the unit is operating. AUTO mode will begin the programs you have previously set. OFF will turn off the device.



8

### Replace the Battery

Remove the control box cover. Use a coin to remove battery cover on the back of the timer. Lift the battery out with a flat head screwdriver. Install new battery. Replace battery cover and then control box cover.



| Problem                                     | Possible Causes  |
|---|--|
| No fuel delivery                            | <ul style="list-style-type: none"> <li>• Pump and filter are not primed</li> <li>• Fuel supply or discharge line blocked. Check the alarm</li> <li>• Lift is too high</li> <li>• Air leak in fuel supply to pump</li> <li>• Inlet or outlet valve closed (if installed)</li> <li>• Foot (check) valve installed backwards or clogged (if installed)</li> </ul> |
| Insufficient fuel delivered                 | <ul style="list-style-type: none"> <li>• Air leak at inlet</li> <li>• Lift too high</li> <li>• Piping improperly installed or dimensioned</li> <li>• Filter/water separator plugged</li> </ul>   |
| Rapid pump wear                             | <ul style="list-style-type: none"> <li>• Pump has been run dry or insufficient fuel</li> <li>• Plumbing on inlet side not appropriately dimensioned.</li> <li>• Air in plumbing lines</li> <li>• Lift too high</li> </ul>  |
| Noisy operation                             | <ul style="list-style-type: none"> <li>• Insufficient fuel supply</li> <li>• Air leaks in the inlet pipe</li> <li>• Lift too high</li> </ul>   |
| Motor does not turn or turns intermittently | <ul style="list-style-type: none"> <li>• Control power not available</li> <li>• Tripped circuit breaker on control board</li> <li>• Pump failed and seized</li> </ul>  |
| Pump leaks fuel                             | <ul style="list-style-type: none"> <li>• Loose pump plumbing fittings</li> <li>• Worn pump shaft seal</li> <li>• Worn pump O-rings or seals</li> </ul>   |