

AUTO-RUN FEATURE ON 4400M RO MACHINES

This Technical Note is intended to describe the purpose, features, operation, and procedure of the AUTO-RUN switch as found on the 4400M RO machine. The AUTO-RUN switch is located on the main RO control panel in the upper left-hand corner.

Purpose

The AUTO-RUN switch is designed to provide a convenient way for the 4400M RO machine to “Run” during long periods of time when there is no demand for RO water. The intention is to provide a function that allows the machine to operate longer (once a day) to reduce times of stagnation, thus helping to eliminate the potential for bacteria proliferation.

Features

- It is settable based on a specific time.
- It can be set for a longer duration than the AUTO-FLUSH function.
- It will operate at normal pressures and flows, unlike during AUTO-FLUSH mode when the reject solenoid is open allowing approximately 2.2 gpm of additional reject flow to drain. AUTO-FLUSH is designed to increase the velocity of the reject from the elements to help flush away impurities.
- It can be used to help reduce bacteria proliferation from exceeding specifications, thus allowing the RO to operate for extended periods of time when AUTO-FLUSH alone is not sufficient.
- The RO will divert-to-drain when AUTO-RUN activates.
- Pretreatment and Sani (heat) Lockout will override all attempts to run the RO machine at all times.

Operation

- The RO must be in the “RUN” or “STANDBY” position. Place the AUTO-RUN switch to “AUTO.”
- At approximately midnight (factory default), the RO will run continuously for 1-1/2 hours provided the RO is not in Lockout mode.
- To adjust the start time sequence, the operator must access the sequence control through the LOGO program installed in the PLC. This is located inside the main RO control panel (see Procedure on how to adjust AUTO-RUN time).
- If the AUTO-FLUSH feature is selected to “Yes” or “Active” when the AUTO-RUN stops, the AUTO-FLUSH sequence will resume (Refer to the User’s Manual for set-up screen descriptions for configuring flush timer values).
- AUTO-RUN will re-engage every night at the factory default setting and can only be reset in the PLC program.

Procedure

This procedure is to access and change the AUTO-RUN time within the PLC platform.

CAUTION: This procedure requires working in an electrical panel. Every attempt at precaution must be taken prior to starting the first step.

- Step 1 Locate the LOGO PLC operating unit and view the screen.
- Step 2 From the Time & Date screen, press the “ESC” button to see this display:
STOP
SET PARMA
SET
PRG NAME
- Step 3 Press the “down” arrow until the indicator reaches SET PARMA.
- Step 4 Press “OK.”
- Step 5 Press the “down” arrow once. “AUTO-RUN” should be displayed at the top.
- Step 6 Press “OK” and the curser should start to blink.
- Step 7 Press the “right” arrow to get the curser to the number you want to change.
- Step 8 Press the “up” or “down” arrow to change the digit.
- Step 9 Press “OK” when you have the desired on/off times entered.
- Step 10 Press “ESC” 2 times. The Time and Date should be displayed. The system should be ready to “Run.”

NOTE: For certain 4400M RO machines, a RO AUTO-RUN switch correction may be necessary. Use the drawings below to verify and follow the instructions as illustrated.

