

Department	HydroLogic		Doc #	SOP – Pretreat	
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## Standard Operating Procedure (SOP); Operating Messages - Pretreat

### 1. Purpose

The purpose of this SOP is to aid users in understanding a HyperLogic RO 'Operating Status Message' – 'Pretreat'

### 2. Applicable To

This SOP is applicable to all HyperLogic Commercial Series RO systems [1-12 membranes] utilizing the Advantage Series 150 or ROC-300 microprocessor controller.

### 3. Prerequisites

Ensure you follow all state & federal guidelines for personal workplace safety prior to disassembly and/or maintenance of your HyperLogic equipment and related consumables.

### 4. Materials/Reference

Suggested tools/materials required for this operation include, but may not be limited to, the following:

- Ref. HyperLogic 'Owner's Manual'
- Ref. SOP – Set-Point

### 5. Procedure

The operating status of the RO unit is shown on the RO display. One of the possible operating system messages includes 'Pretreat, indicating that the RO has shut down due to pretreat (pretreatment) lockout condition. If the pretreatment input becomes active for 2 seconds or more, the unit will shut down. Refer to 'Figure 1' for Pretreat Switch Wiring. Oftentimes, multiple pretreatment components will be wired to trigger the 'Pretreat' message. Such conditions can be related to one, or more, of the following possible scenarios:

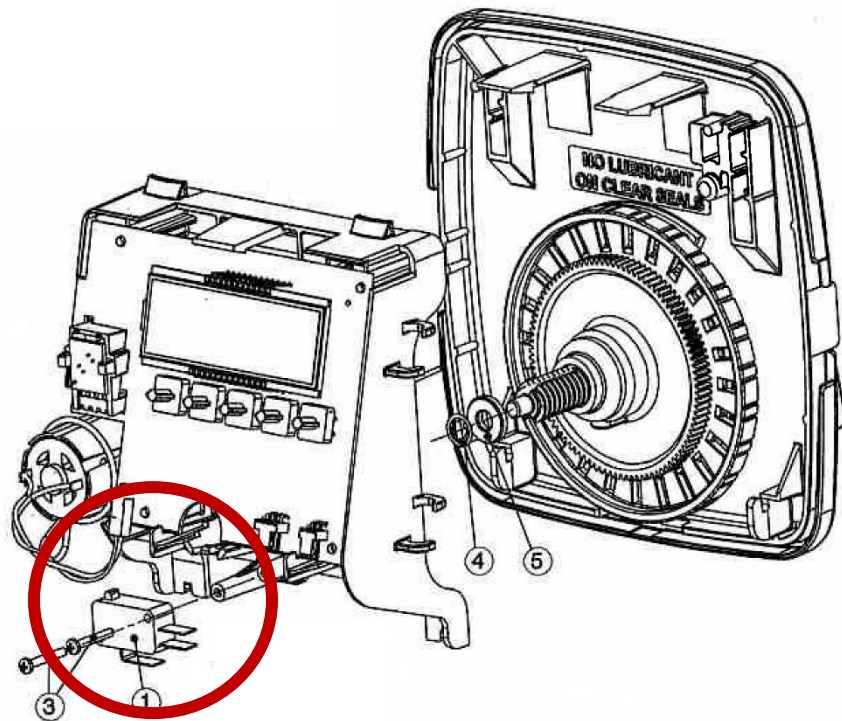
#### a. Chemical Injection

- Each Chemical Injection system (i.e., AntiScalant, Chlorine, Sodium Bisulfide, Acid, etc.) features a low-level dry contact electronic float. This dry-contact float system will "pause" RO operation when the fluid level is too low. Refer to image; switch junction box seen **circled in red**.
  - Suggested: Rebatch/refill the chemical injection tank with appropriate solution.



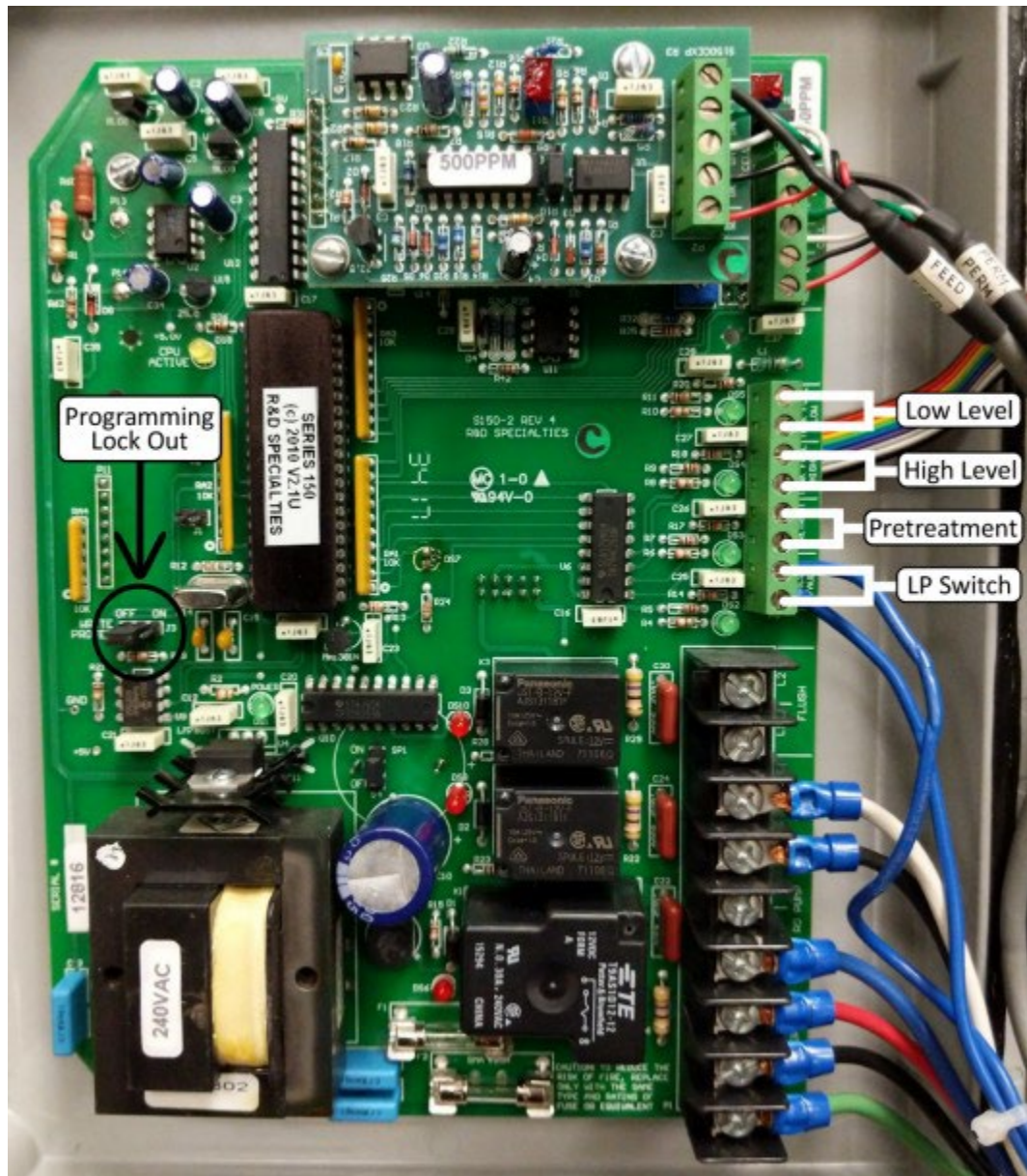
**b. Media Tank Prefiltration**

- i. During an automatic or manual regeneration/backwash operation of a media tank utilizing the electronic regenerating head, the media head will send a dry contact signal to the RO, placing it in a 'Pretreat' formal until the automatic regeneration/backwash operation has completed. This temporary "pause" in RO operation is often less than 30-minutes.
  1. Suggested: Regenerate each media tank to ensure that the dry contact microswitch has been properly activated. Refer to image; switch **circled in red**.
- ii. Refer to the associated media tanks' 'Owner's Manual' or 'SOP – Perform Manual Regen' documents for additional details.



**c. ORP**

- i. Though quite rare, a select number of our systems feature an ORP Monitoring system. If the ORP exceeds the preset limitations, the RO will pause operation until the ORP levels can be rectified.



**Figure 1**

END OF SOP DOCUMENT

Email [hypertechsupport@hydrologicsystems.com](mailto:hypertechsupport@hydrologicsystems.com)