

norweco® **SINGULAIR**®

DRY CHEMICAL FEED SYSTEM

CHEMCHECK® SYSTEM INSTALLATION

Bio-Kinetic system feed tubes dispensing dry chemicals must be filled with tablets to insure proper chemical dosing. When Norweco wastewater treatment systems are installed with effluent disposal systems requiring disinfection or chlorine removal, the optional ChemCheck chemical detection system alarms when the feed tube needs to be refilled. The ChemCheck system is designed to work with a Norweco Integrated System Control Center or any other low voltage alarm system compatible with a normally closed sensor.

These instructions are directed only to the specific requirements of the optional ChemCheck dry chemical detection system. They are not intended to cover all aspects of Singulair control center service and installation. Additional information is contained in the Bio-Kinetic Wastewater Treatment System Service instructions and the Singulair System and Control Center Service instructions.

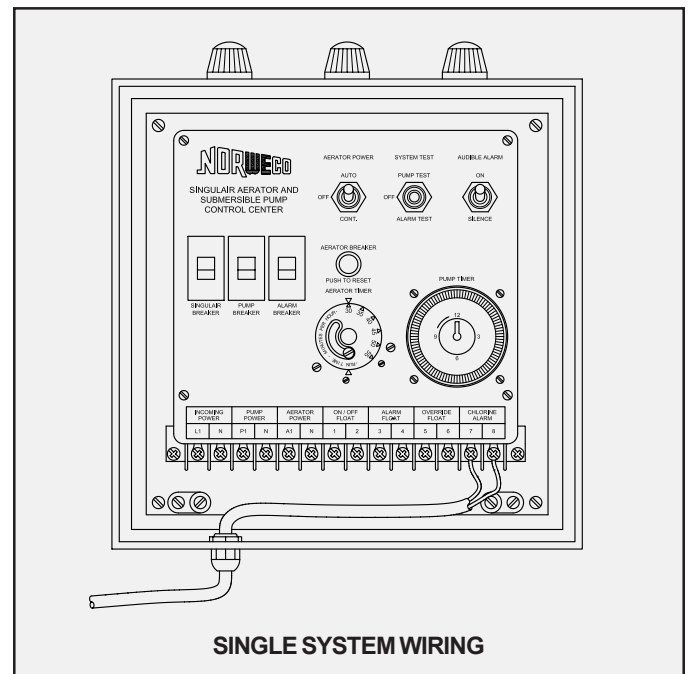
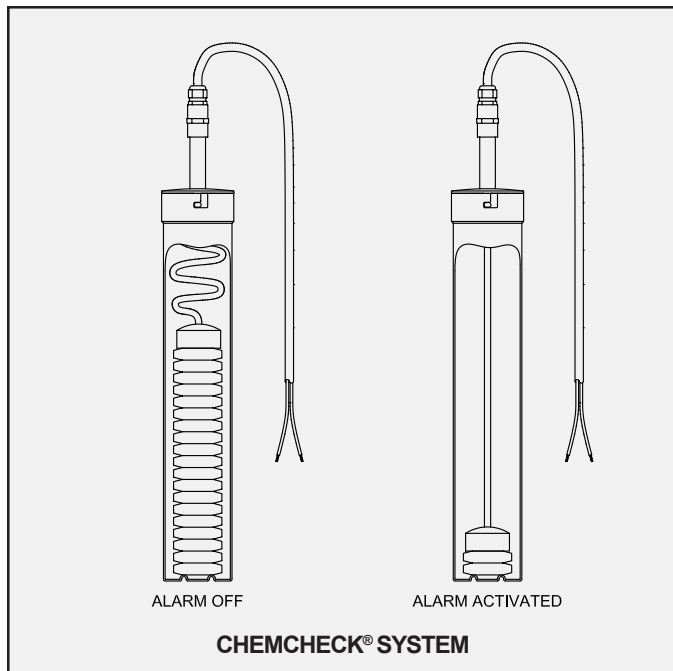
FUNCTIONAL TEST OF CHEMCHECK® SYSTEM

Using a multimeter, measure the resistance (ohm reading) between the two leads of the ChemCheck chemical detection system.

When there is slack in the line attaching the weight to the ChemCheck cap the multimeter should read nearly zero resistance. Carefully lift the cap until the weight is fully supported by the line connecting the weight to the cap. The multimeter should now read infinite resistance.

Insert the weight into the feed tube opening and twist the ChemCheck system cap clockwise to insure that it locks properly.

If both of these resistance measurements are correct and the ChemCheck system fits securely inside the ClearCheck feed tube, the system is ready for installation.



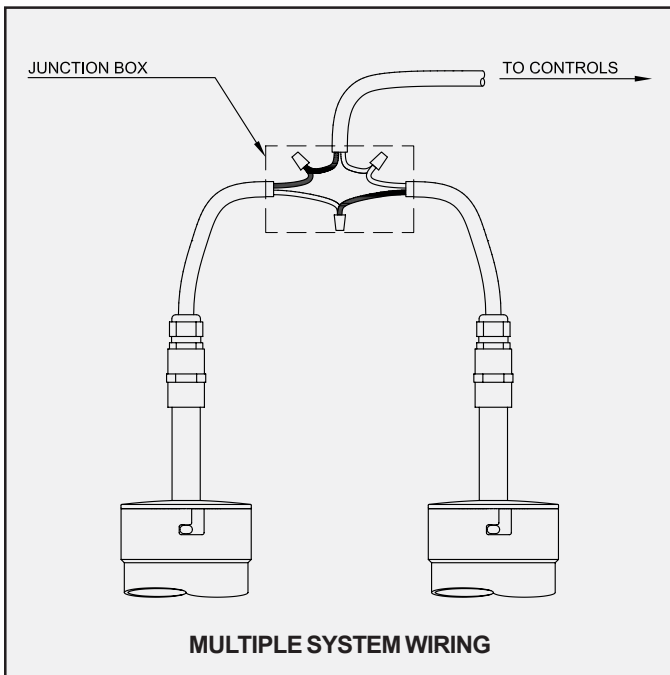
CHEMCHECK® SYSTEM INSTALLATION

When the ChemCheck system is ready for installation, feed the two wire cable through the cast in hole in the Bio-Kinetic system riser and into an electrical junction box securing the cable through the junction box cable connector. Use conduit or other cable protection as local regulations require.

When installing with a Model BK 2000, use an electrical junction box equipped with a strain relief mounted on either flat panel adjacent to the plumbing connections for connecting the cord. On Singulair and Bio-Kinetic system installations, be sure to leave sufficient wire to insure the feed tube can be easily removed from the riser during feed tube refill.

The ChemCheck chemical detection system operates using low voltage. Use 16 gauge wire for connecting the device to the electrical control panel.

CHEMCHECK® SYSTEM INSTALLATION (Cont.)



Strip back $\frac{5}{8}$ " of the wire insulation on both leads. Splice the two leads to the corresponding wires that connect the sensor to the Integrated System Controller or the control panel that will receive the ChemCheck output signal.

NOTE: For installations using the tank mount Integrated System Controller or another tank mounted control device, the cord supplied with the ChemCheck system can be wired directly to the panel without an additional splice.

When installing the ChemCheck system using an alarm or control panel other than a Norweco Integrated System Controller, insure that the controls reading the signal from the ChemCheck system are compatible with a normally closed input and operate on a maximum of 12 volts.

When more than one ChemCheck chemical detection system is used on a single installation, the sensors must be connected in series in a junction box. Using wire nuts, splice the white wire from one ChemCheck unit to the black wire from the next ChemCheck unit. The remaining wires from the units (two wires total one black and one white) should be spliced to the leads going to the Integrated System Controller or alternative control panel.

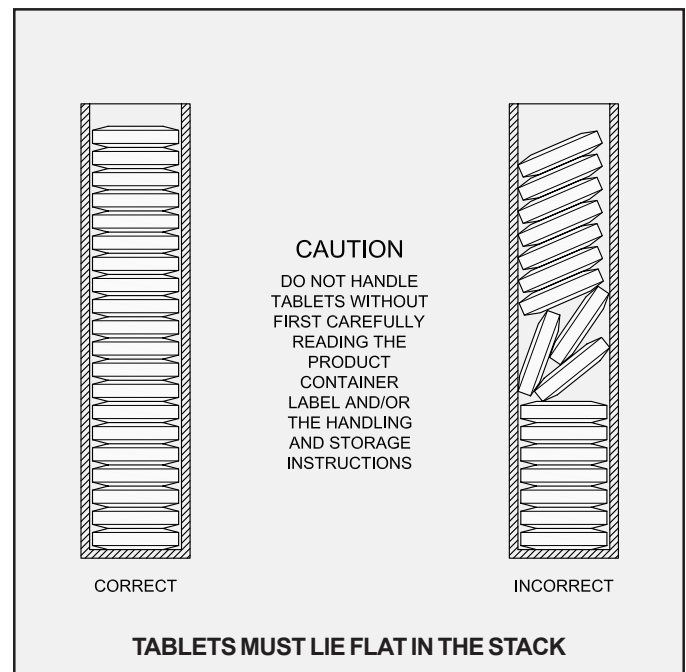
The leads coming from the ChemCheck unit(s) should be connected to the corresponding control panel terminals. For the Integrated System Controller, these two terminals are marked CL.

CAUTION: The ChemCheck system is designed to operate on a maximum of 12 volts. Wiring this system to a higher voltage will damage the unit and could damage the electrical control panel. All wiring should follow NEC guidelines.

FILLING THE FEED TUBE

Before installing the ChemCheck system, follow these instructions for placing Norweco tablets into the feed tube:

1. Before handling chemical tablets, carefully read the product container and follow all handling instructions for the chemical tablets used.
2. When filling feed tubes, always wear rubber gloves and safety goggles or a face shield for proper protection.
3. When filling a feed tube after removing it from service, rinse the feed tube and cap thoroughly with fresh water. Dry as required.
4. Hold the extended tube, slotted end up, at a 45° angle and slide tablets into the tube, one tablet at a time.
5. Insure that all tablets lie flat, on top of one another, in the extended feed tube.
6. Use your gloved hand to retain tablets inside the open end of the inverted tube while filling.
7. Carefully return the extended tube to upright position.
8. Place the ChemCheck system weight on top of the chemical tablet stack coiling the connecting line on top of the weight.
9. Tighten the ChemCheck system cap securely in place on top of the feed tube.
10. Place tube back into housing, slotted end down.
11. Be sure the extended feed tube is fully engaged and rests evenly on the floor of the flow channel.



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