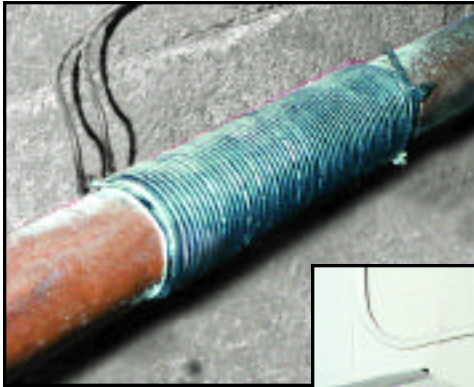


TRIANGULAR WAVE TECHNOLOGIES TUBE & PIPE APPLICATION GUIDELINES

TO ENSURE THE MAXIMUM EFFECT AND RESULTS OF OUR DEPOSIT CONTROL SYSTEMS PLEASE FOLLOW THESE GUIDELINES:



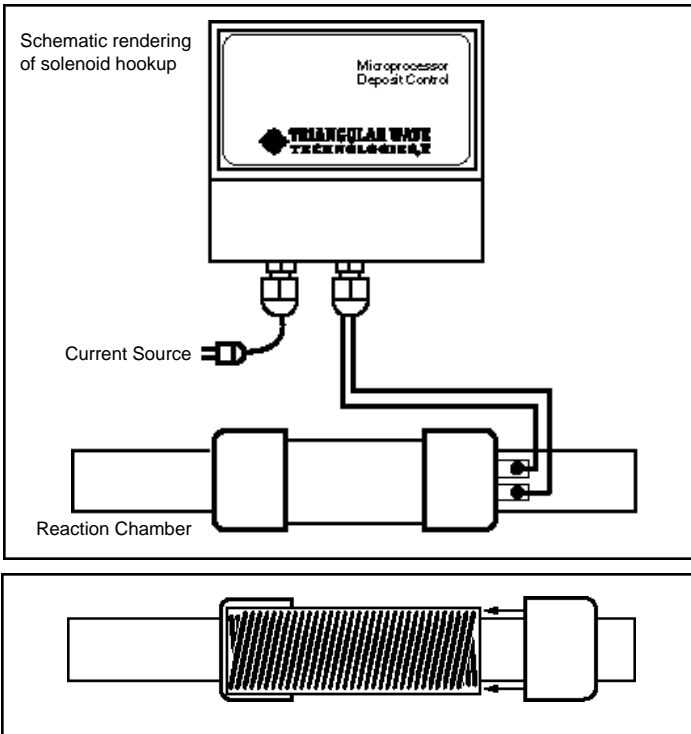
Solenoid wrapped pipe

Solenoid wrapped pipe
(Coil hidden by insulation)
with deposit controller



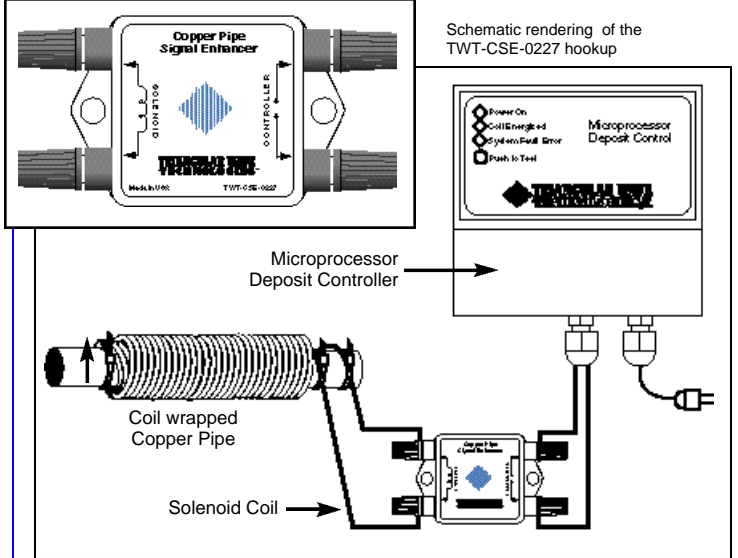
TRIANGULAR WAVE TECHNOLOGIES REACTION CHAMBERS

To use in conjunction with the TWT Deposit Control Systems when required, Triangular Wave Technologies, Inc. has developed a line of factory-wrapped wire coil Reaction Chambers to address magnetic pipe environments. Typically, wire coil cannot be installed on any magnetic pipe, such as steel, galvanized steel, ductile iron, or cast iron. When the coil is applied to a magnetic material, the pipe becomes a shield and prevents the wave energy from entering the fluid path. The TWT Reaction Chambers provide an easily installed section of non-magnetic pipe to provide the proper pipe material for the Deposit Control System to work as designed. The TWT Reaction Chambers are fully sealed, protecting their two layers of factory-wrapped coil. The PVC, Stainless Steel and the Industrial Reaction Chamber systems are designed and manufactured to meet the highest quality specifications.



Schematic drawing of Reaction Chamber showing Solenoid Coil

TWT-CSE COPPER PIPE SIGNAL ENHANCER (For copper pipes only)

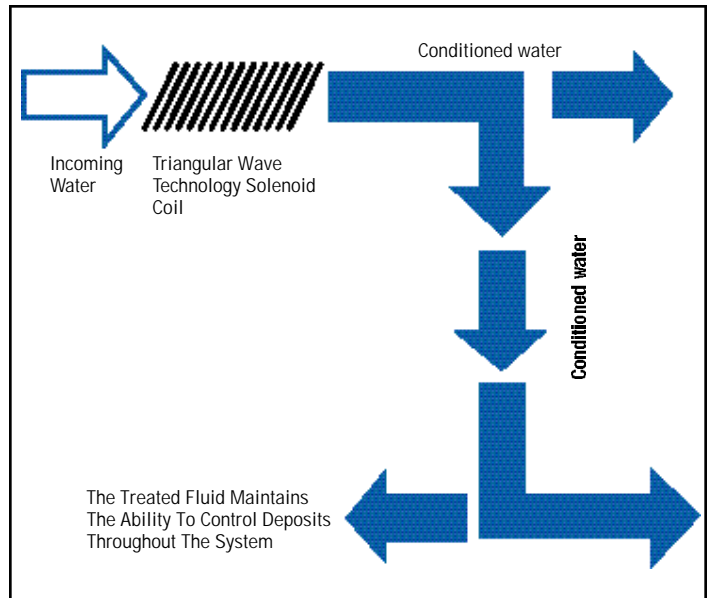


Copper pipes, although acceptable, are one of the more difficult of materials to work with. To overcome this difficulty...

Triangular Wave Technologies is pleased to announce its Copper Pipe Signal Enhancer System. This unit is placed between the controller and the copper pipe solenoid. The function of the signal enhancer system is to provide a proper impedance match and to ensure maximum energy transfer between the controller and the solenoid, which ensures enhanced treatment of the fluid. Most copper pipe applications will not need the increase in performance afforded by the signal enhancer, in those cases in which you wish to maximize the performance, the signal enhancer will provide a boost to your application.

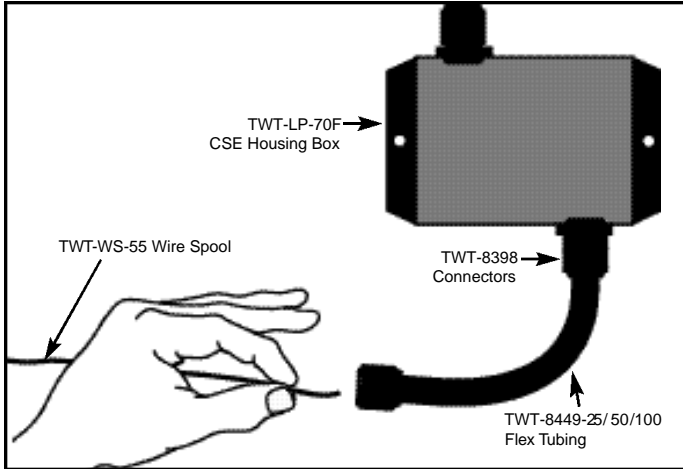
The copper signal enhancer is a passive signal / impedance matching circuit. This device provides a power boost to the conditioning signal in copper pipes.

WHEN THE TWT SYSTEMS ARE PROPERLY INSTALLED THE EFFECTS OF THE TRIANGULAR WAVE TECHNOLOGY TREATMENT LAST DOWNSTREAM

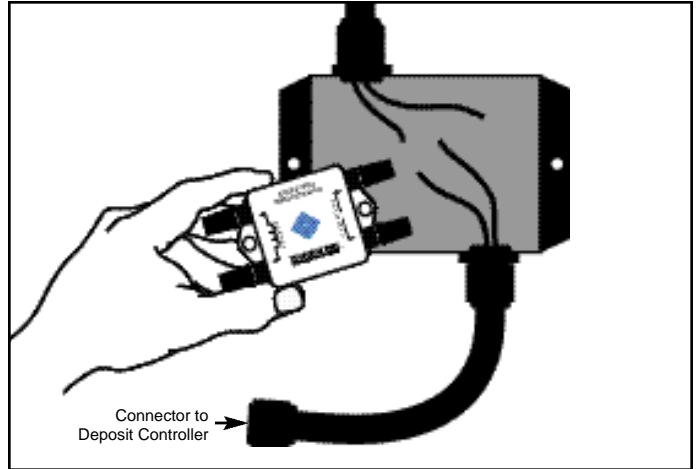


TRIANGULAR WAVE TECHNOLOGIES TUBE & PIPE APPLICATION GUIDELINES

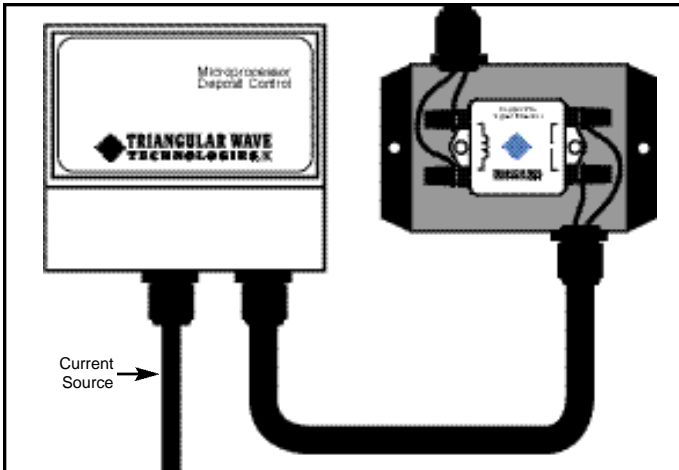
On Site Professional Installation Assembly When Using Copper Signal Enhancer



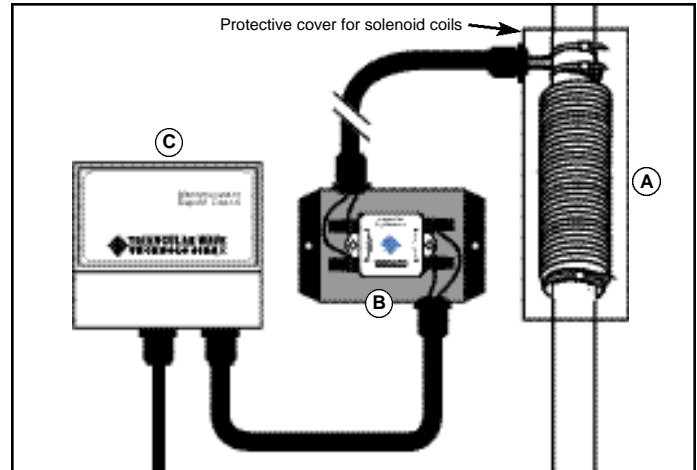
Insert wire through black flex tubing and into mounted CSE housing box, leave enough wire for CSE Unit connection.



Secure CSE Unit to housing and connect wires to unit



Copper signal enhancer correctly wired and installed



Completed System Installation Must Reflect:

- A.** Solenoid coil correctly field wrapped and /or factory wrapped Reaction Chamber Installed
- B.** Optional, CSE (copper signal enhancer) securely mounted in CSE Housing
- C.** Visual placement suitable for periodic visual inspection of LED'S
All wires must be securely fastened and / or taped to connections
All associated wiring/conduit/line cords must be fastened with plastic wire ties and out of harms way

Accessories:

Flex Tubing:

- TWT-8449-25 – 25 ft.
- TWT-8449-50 – 50 ft.
- TWT-8449-100 – 100 ft.

CSE Black Housing Box: (To mount and enclose CSE Unit)

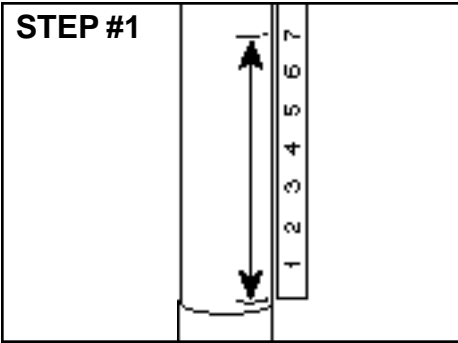
TWT-LP-70F

Connectors: (For Flex Tubing and CSE Black Box)

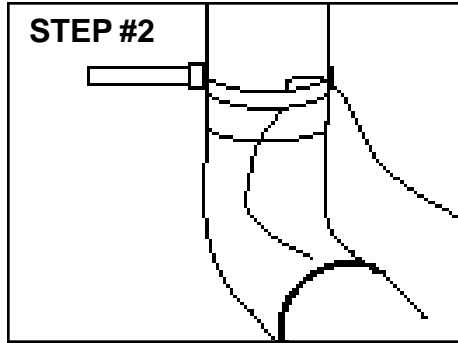
TWT-8398

TRIANGULAR WAVE TECHNOLOGIES TUBE & PIPE APPLICATION GUIDELINES

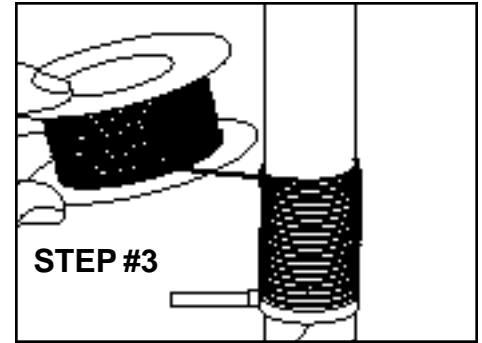
Step by step installation Instructions for onsite solenoid Coil Wrap for Model#TWT-5C8-402



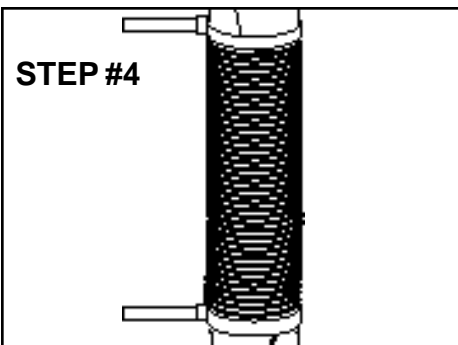
STEP #1
Measure and mark a 7" section in the middle of a straight pipe segment.



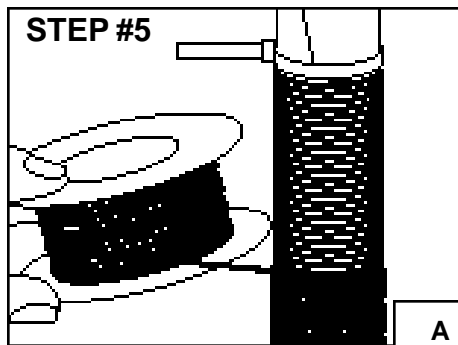
STEP #2
Fasten the signal wire to the pipe with a cable tie (provided) at one end of the 7" section.



STEP #3
Wrap the signal wire around the pipe in a tight coil, in a clockwise manner, so that the adjacent wires are touching each other.

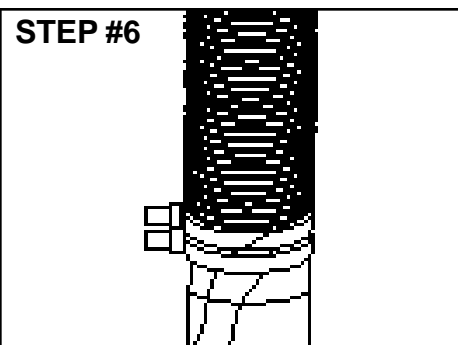
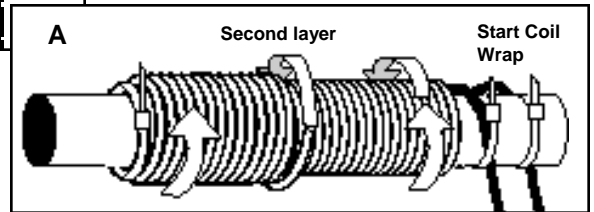


STEP #4
Continue to wrap until the 7" section of pipe is completely covered. Fasten down the end of the coil with the second cable tie (provided). You can hold the first layer in place with cloth tape or electrician's tape.

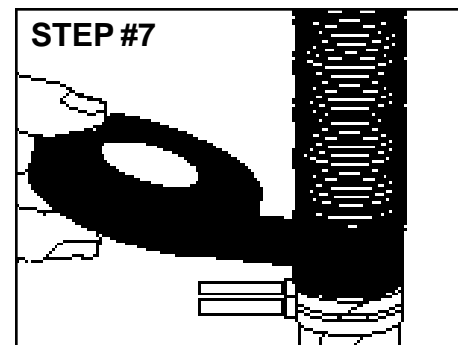


STEP #5
Add a second layer to the coil by continuing to wind in a clockwise manner starting where you completed the first layer and wind **back in the direction of the starting**

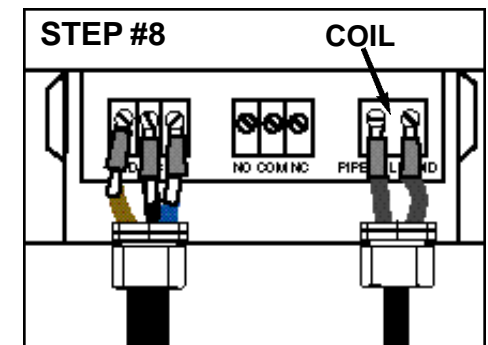
point. (see Diagram A) Do Not Twist or Cut Wire or the System WILL NOT Function. Place the second layer directly on top of the first layer. Be careful to wind the second layer tightly **in the same clockwise manner** as the first layer **back in the direction of the starting point.**



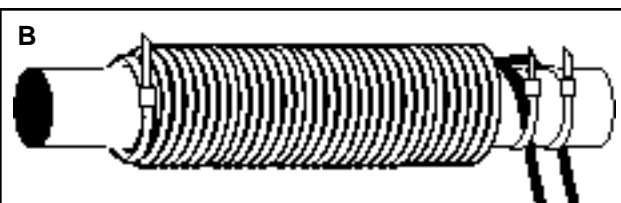
STEP #6
Complete the second layer by clamping the wire with third cable tie (provided). *(See Diagram B Below)*



STEP #7
Wrap the coil with electrician's tape or cloth tape (duct tape) to help maintain a tight coil and protect the coil from being disturbed.



STEP #8
Guide both wires to the Triangular Wave Unit and leave about 2" of extra wire.



On site solenoid wrap sizes vary, for further instructions regarding the completion of the installation, please refer to your Owner/ Installation Manual.