

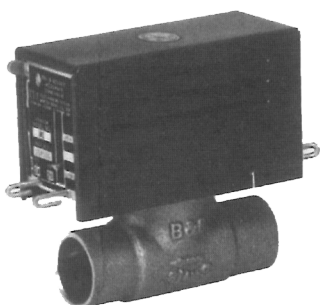


# Conversion Instructions

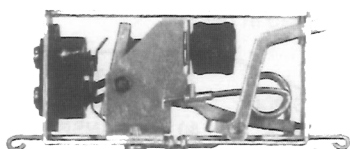
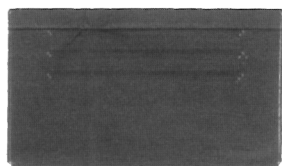
**CONVERTING A MODUMATE® ZONE CONTROL VALVE  
TO A COMFORT-TROL® ZONE CONTROL VALVE 2-WAY 24 VOLT MODEL ONLY**

**REPLACING A MODUMATE VALVE OPERATOR, BONNET & RETAINER ASSEMBLY WITH  
COMPARABLE COMFORT-TROL VALVE ASSEMBLIES (ONLY PART TO BE RETAINED IS THE BODY)**

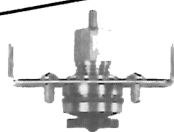
## MODUMATE VALVE (OLD)



COVER  
"LIFT TO REMOVE"



SQUEEZE  
SPRING RODS  
TO REMOVE  
VALVE OPERATOR

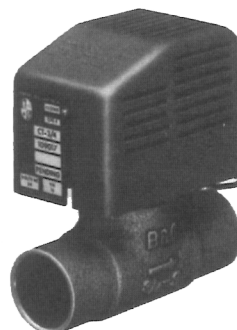


SEAL AND  
SEAT ASSEMBLY  
FOR 2 WAY  
MODUMATE VALVE

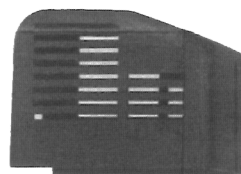


2-WAY VALVE  
BODY  
FIG. 1

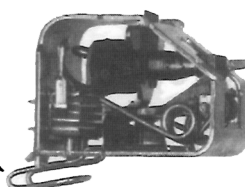
## COMFORT-TROL VALVE (NEW)



SPREAD  
COVER AT  
BOTTOM TO  
DISENGAGE  
LOCKING  
TABS AND  
LIFT UP TO  
REMOVE  
COVER



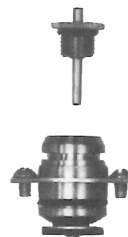
SQUEEZE  
FORMED WIRE  
RELEASE TABS  
AND LIFT UP  
TO REMOVE  
OPERATOR



POSITION  
INDICATOR

COMFORT-TROL  
OPERATOR

BONNET &  
RETAINER  
ASSEMBLY



COMFORT-TROL  
VALVE BODY

FIG. 2



## SAFETY INSTRUCTION

This safety alert symbol will be used in this manual to draw attention to safety related instructions. When used, the safety alert symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED! FAILURE TO FOLLOW THE INSTRUCTIONS MAY RESULT IN A SAFETY HAZARD.

1. Turn off power to operator.
2. Reduce system pressure to zero to let system cool to 100°F or less.



**WARNING:** Hot components and hot fluids under pressure. Let operator cool to 100°F or less. Reduce system pressure to zero and let system cool to 100°F or less before attempting to convert ModuMate to a Comfort-Trol. Failure to follow these instructions could result in serious personal injury or death and property damage.

3. Identify power leads to ModuMate valve terminals #1 and #2, and terminals #3 and #4 to the "T" terminals on the boiler relay. Disconnect all leads. Refer to wiring diagrams below when necessary. Mark leads as to terminal they were removed from.
4. Remove the ModuMate valve operator by squeezing the formed wire release tabs together and lifting up.
5. Remove retaining screws securing seal and seat assembly. Turn steel bracket so that it is perpendicular to valve body. Lift up with a twisting motion to remove.



**CAUTION:** Transformer failure. Do not wire more than three Comfort-Trol or ModuMate zone control valves to one 40 VA transformer. Failure to follow these instructions could result in property damage and/or moderate personal injury.

**NOTE:** Terminal #3 is not used if a continuously operating pump is used.

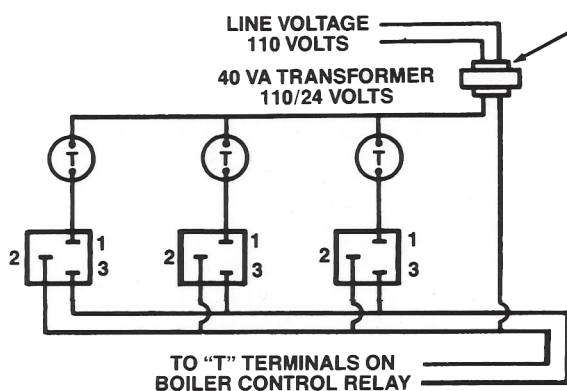


FIG. 3  
1, 2 OR 3 COMFORT-TROL VALVES —  
SINGLE TRANSFORMER  
INTERMITTENT PUMP OPERATION

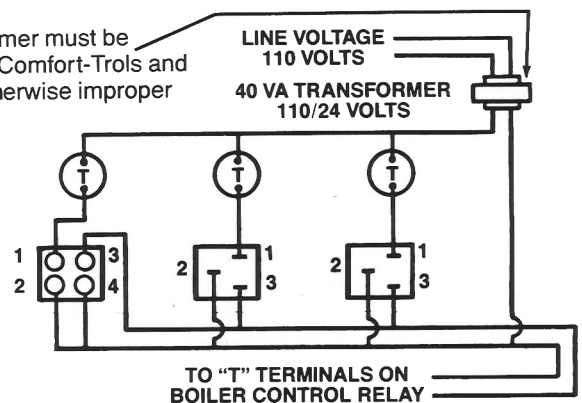
6. Install the Comfort-Trol valve bonnet and retainer assembly, and secure with retaining screws. Be careful not to damage O-ring seal when inserting bonnet and retainer assembly. If a lubricant is required, apply silicone grease to O-ring. Do not use lubricants with a petroleum base.
7. Assemble Comfort-Trol valve operator onto valve body by pushing down on operator until wire retainers inside operator frame snap into retaining groove on brass bonnet.
8. Using the solderless connectors (included), insert leads #1 and #3 removed from ModuMate operator and crimp into round end of connectors with a crimping tool or pliers. Insert leads #2 and #4 removed from ModuMate operator and crimp together into remaining connector. Test crimps by pulling on wires trying to separate them from the connectors. Connect leads from the ModuMate operator to their respective blade terminal on the Comfort-Trol operator by pushing the connectors onto the blades until the locking catch snaps into place. Wires #2 and #4 both go onto terminal #2 of Comfort-Trol.
9. Pressurize and vent the system.
10. Restore power.

**NOTE:** For continuous pump operation – Terminal #3 is not used.



**CAUTION:** Improper wiring. Figure 4 and the conversion instructions in this manual are appropriate only if the ModuMate was wired correctly to instructions supplied for original installation. This will have to be corrected before proceeding with conversion. Failure to follow these instructions could result in property damage and/or moderate personal injury.

Use the solderless terminals included with #18 and #22 gauge wire to connect the wires to the valve terminals. Push the terminals on until they snap in place.



**NOTE:** Terminal #3 is not used if a continuously operating pump is used.

FIG. 4  
COMFORT-TROL AND MODUMATE VALVES  
WIRED TO THE SAME TRANSFORMER  
INTERMITTENT PUMP OPERATION

**xylem**  
Let's Solve Water

Xylem Inc.  
8200 N. Austin Avenue  
Morton Grove, Illinois 60053  
Phone: (847) 966-3700  
Fax: (847) 965-8379  
[www.xyleminc.com/brands/bellgossett](http://www.xyleminc.com/brands/bellgossett)

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