STAND PIPES / SPRINKLER TANKS
HEATER APPLICATION

GAS FIRED
COPPER HEAT EXCHANGER (UPFLOW)
HW-300 THRU HW-670

CAUTION: IF BUILDING COLD WATER
SUPPLY HAS A BACKFLOW PREVENTER,
CHECK VALVE OR WATER METER WITH
CHECK VALVE. PROVISIONS FOR
THERMAL EXPANSION OF WATER IN THE
HOT WATER SYSTEM MUST BE
PROVIDED.

WATER HEATING SYSTEM FOR ELEVATED STORAGE TANK

WARM WATER INLET TO TANK
APPROX 1/3 OF TANK HEIGHT
INTO TANK

GRAVITY TANK

DISCHARGE PIPE

VALVE A

STOP VALVE IN
BY-PASS LINE
(SEE TABLE A)

VALVE PIT

CIRCULATING PUMP

SAFETY FLOW SWITCH

PRESSURE RELIEF VALVE

REMOTE MOUNTED RETURN LINE THERMOSTAT CONTROLS GAS BURNER (NOTE 3)

INTAKE SUPPLY TO HEATER
AT BOTTOM TEE ON MAIN
DISCHARGE PIPE

VALVE ADJUSTMENTS
(BOOTH SYSTEMS)
Condensation in heater can be
minimized by partially opening bypass
valve and slightly closing valve “A” to
establish approximately 115° heater
outlet temperature. If heater temperature
rise is excessive, close bypass valve.

WATER HEATING SYSTEM FOR SUCTION TANK

DISCHARGE PIPE

STOP VALVE IN
BY-PASS LINE
(SEE TABLE A)

VALUE A

VALVE PIT

IF VALVE PIT IS USED
SUPPLY TO HEATER
SHOULD BE TAKEN
FROM POINT A

CIRCULATING PUMP

SAFETY FLOW SWITCH

PRESSURE RELIEF VALVE

REMOTE MOUNTED RETURN LINE THERMOSTAT CONTROLS GAS BURNER (NOTE 3)

SUPPORT BLOCKS

WIRING DIAGRAM FOR
STANDPIPES / SPRINKLER TANKS

OUTDOOR THERMOSTAT
CONTROLS PUMP
(NOTE 1)

120V SUPPLY

FUSED DISCONNECT SWITCH

HEATER JUNCTION BOX

SEE INSTALLATION MANUAL FOR
SPECIFIC MODELS FOR FACTORY
WIRING.

RETURN LINE THERMOSTAT
(SAFETY) (NOTE 3)

FLOW SWITCH

OUTDOOR THERMOSTAT RANGE 0°F TO 70°F, SET AT 40°F
RETURN LINE THERMOSTAT. REMOTE BULB TYPE, 0°F TO
70°F, SET AT 40°F
RETURN LINE THERMOSTAT M-H AMBOSTAT #1-4000-C
OR EQUAL. REMOTE BULB TYPE, 0°F TO 70°F, SET AT
40°F.

PIPING ARRANGEMENT
TWO-HEATER HW-670 INSTALLATIONS

June 2010R

AOSSG88190
NOTE: ELEVATED TANKS SHOWN AS TYPICAL. FOR SUCTION TANKS, SEE AOSSG88190 AND NFPA NO. 22 FOR PIPING TO AND FROM TANK.

CAUTION: IF BUILDING COLD WATER SUPPLY HAS A BACKFLOW PREVENTER, CHECK VALVE OR WATER METER WITH CHECK VALVE, PROVISIONS FOR THERMAL EXPANSION OF WATER IN THE HOT WATER SYSTEM MUST BE PROVIDED.

NOTE: DIAGRAMS SHOWN ARE TYPICAL APPLICATIONS OF OIL FIRED HEATERS INSTALLED WITH SPRINKLER SYSTEM TANKS. APPROVAL FROM INSURANCE COMPANY REQUIRED PRIOR TO INSTALLATION.

VALVE ADJUSTMENTS
Condensation in heater can be minimized by partially opening bypass valve and slightly closing valve "A" to establish approximately 115° heater outlet temperature. If heater temperature rise is excessive, close bypass valve.

FIELD WIRING
--- LOW VOLTAGE
------ LINE VOLTAGE

NOTE 1:
OUTDOOR THERMOSTAT; RANGE 0°F TO 70°F, SET AT 42°F.

NOTE 2:
RETURN LINE THERMOSTAT; REMOTE BULB TYPE, 0°F TO 70°F, SET AT 40°F.

NOTE:
ELEVATED TANKS SHOWN AS TYPICAL. FOR SUCTION TANKS, SEE AOSSG88190 AND NFPA NO. 22 FOR PIPING TO AND FROM TANK.