

OPERATING INSTRUCTIONS

8110
(4516)
OK(4616) VAPOR-CLARKSON STEAM GENERATORS
(4625) (Numbers refer to schematic
(4630) piping diagram.)

CAUTION: DO NOT START THE STEAM GENERATOR
UNLESS COILS ARE FILLED.

TO FILL THE STEAM GENERATOR

1. Latch open the separator blowdown valve-12. Open the fill-test valve-4 and the atomizing air shut-off valve-1.
2. Check the overload reset button-106 and stack switch-109 reset button. Check the position of ALL valves.
3. When the steam separator-221 is completely drained, close the separator blowdown valve-12. Then close the main switch and turn the control switch-102 to FILL. Check the ignition spark-220 while the coils are filling.
4. Turn the control switch-102 OFF when water flows from the fill-test valve-4; then close the fill-test valve.

TO START THE STEAM GENERATOR

1. After the MOTOR HAS STOPPED, open the separator blowdown valve-12 and turn the control switch-102 to RUN. The fire should light immediately.
2. Close the separator blowdown valve-12 when the generator steam pressure gauge-212 registers 100 lbs.
3. Blow down the steam separator-221 several times for 3 to 5 second intervals during the first few minutes of operation.
4. After the trainline is coupled, open the stop and check valve-15.

TO PUT ON "STANDBY"

1. Follow normal procedure to fill generator.
2. Follow steps 1 to 3 of starting procedure, with water by-pass regulator set at 200 lbs.
3. Turn control switch-102 to OFF.
4. Open coil blow-down valve-2 and blow pressure down to 75 lbs. on steam pressure gauge-212.
5. Close coil blow-down-2 and open separator blow-down valve-12 until pressure drops to 0.

6. Close separator blow-down valve-12 and see that stop and check valve-15 is closed.
7. Open standby return line valve-56 and steam admission valve-10 water tank radiator.
8. Turn control switch-102 to STANDBY.

TO RETURN TO "PASSENGER" FROM "STANDBY"

1. Turn control switch-102 to OFF.
2. Close standby return line valve-56 and steam admission valve to water tank radiator-10.
3. Follow normal procedure "To Start Steam Generator".

RUNNING ATTENTION

1. Blow down the steam separator-221 at least once every hour (except when in STANDBY operation.)
2. During stops, turn the handle on the suction line fuel filter-206.

TO SHUT DOWN THE STEAM GENERATOR.

For short stops it is necessary only to close the stop and check valve-15; the fire will cycle off and on, and maintain operating pressure in the steam generator. For terminal stops, proceed as follows:

1. Close the stop and check valve-15.
2. Turn the control switch-102 OFF and open the coil blowdown valve-2. When generator pressure drops to 75 lbs. close the coil blowdown valve and open the separator blow-down valve-12. After the steam separator is completely drained, close this valve.
3. Refill the coils, then turn the control switch-102 OFF, and open the main switch.

COLD WEATHER PRECAUTIONS

During freezing weather, steam generator should be on either "Run" or "Standby". When generator is not heating train and generator is on "Run", steam admission valve-10 to water tank radiator should be cracked sufficiently to prevent freezing of water in tank if outside temperature is 0°F. or lower.

CAUTION: DO NOT ALLOW WATER IN TANK
TO HEAT ABOVE 100° FAHR.