The maintenance information listed in this section deals with the limitations and parameters of this pre-engineered system. Those individuals responsible for the maintenance of the R-102 system must be trained and hold a current ANSUL certificate in an R-102 training program.

Maintenance is required semi-annually. At the 12 year interval, along with the normal maintenance exam, the tank(s) must be hydro-tested and the regulator(s) must be flow tested.

Prior to performing the required maintenance steps, verify that the R-102 system protection is designed and installed correctly for the existing appliance and ventilation system configuration. If not, make corrections as required.

SEMI-ANNUAL MAINTENANCE EXAMINATION

Semi-annual maintenance procedures for single, double, and multiple-tank systems are as follows.

NOTICE

Under certain circumstances hood and duct cleaning operations may render the fire suppression system ineffective due to a coating of cleaning chemical left on the detection equipment or mishandling of the system by cleaning service personnel. **Therefore, it is strongly recommended that the R-102 system be completely inspected and serviced by an authorized ANSUL distributor immediately following any such cleaning operations.**

1. Remove the enclosure cover from the AUTOMAN regulated release assembly and each regulated actuator assembly.
2. Insert the lock bar (Part No. 14985) or lock pin (Part No. 438031) on the cocked regulated release mechanism. See Figure 8-1 or Figure 8-2.

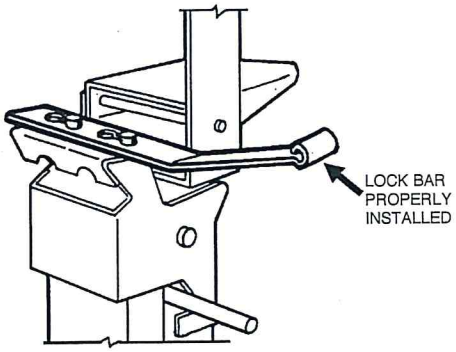

FIGURE 8-1
000321

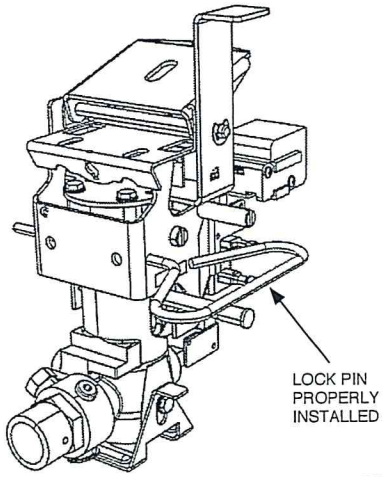

FIGURE 8-2
009462

3. Remove cartridge from regulated release assembly and each regulated actuator assembly, install safety shipping cap, and set aside in a safe location.
4. Check to make certain the actuation line used to connect the regulated actuator assembly(s) to the AUTOMAN regulated release assembly is connected to the high pressure side (right side) of the cartridge receiver in the AUTOMAN and that it is intact, with all fittings securely tightened. This includes any 1/8 in. copper tubing and fittings used to connect to the air cylinder for the ANSUL mechanical gas valve.

CAUTION

If the actuation line leaks pressure, the regulated actuator assembly(s) may not operate. A severe leak can render the entire system inoperable.

5. To check for leaks in the actuation line, a hand held or electric vacuum pump may be used:
   a. Disconnect the actuation line from the AUTOMAN regulated release cartridge receiver and connect the pump to the line.
   b. The pump should pull a vacuum to 20 inches of mercury, as shown on the gauge. Leaks should not exceed 5 inches of mercury loss within a 30 second time frame.
   c. If the gauge indicates a leak in the line, examine for loose connections or damage. Repair or replace as needed.
   d. If leakage is not due to piping, disassemble the pneumatic actuator assembly(s) in the regulated actuator(s) and inspect the actuator and the o-ring in the actuator. Repair or replace as needed.

   Note: Vacuum pumps can be obtained from automotive parts/supply stores.