

### RETORT SAFETY AND MAINTENANCE

1. Exercise caution when an Oil and Water Retort Kit is in operation. The case, near the heating jacket, the sample chamber, and the condenser assembly operate at high temperatures and may cause burns on contact. Avoid touching these parts. Safeguard the retort after the test is complete to assure complete cool down. Many retort parts can still cause burns long after the retort has been turned off.
2. Cooling the retort sample chamber or condenser with water is a very dangerous procedure and is not recommended. There is the danger of severe burns if the heated parts are touched, or from the resulting steam. In addition, thermal stress can easily weaken metal parts, making them susceptible to stress-induced cracking when heated.
3. Make sure the electrical source is fused and properly grounded. Verify that the power cord on the retort kit is in good condition and has the proper ground connection.
4. Electrical problems in the wiring or heaters may not be obvious by external observation of the retort. If the retort repeatedly blows a fuse, trips a circuit breaker or heats too slowly or erratically, electrical repair is indicated.
5. Clean the sample chamber thoroughly after each test, especially the spout. The wire brush (Fann No. 205850) can be used for spout cleaning. For hard, baked – on materials, a long #31 drill bit (Fann NO. 206118) with handle (Fann No. 206119) should be used, ensuring that the entrance to the spout inside the sample chamber is clean.
6. Drill out the hole in the sample chamber lid to at least .25" (6 to 7mm).
7. After each test, replace the steel wool in the upper chamber to prevent solids buildup.
8. Inspect the threads on the sample chamber (upper and lower) before each test. Check for signs of 'belling' of these threads or for movement (rattling) when the threads are being engaged. These symptoms are signs of abnormal strain and structural weakening of the threads and could lead to separation under abnormal pressure conditions.

Remove from service each retort, especially for offshore operations, at least once every six months for thorough examination and cleaning.