

Maintenance Task

PM No. **Title**

P09 **PUMP, CIRCULATING (FRACTIONAL HP)**

Frequency

SEMIANNUAL
ANNUAL

MAINTENANCE TASK DESCRIPTION:

1. Clean and inspect the circulating pump. (Semi Annual)
2. Lubricate the circulating pump. (Semi Annual)
3. Operational test of the circulating pump. (Semi Annual)
4. Inspect and clean motor. (Annual)

SPECIAL INSTRUCTIONS FOR CIRCULATING PUMP:

1. Perform applicable lockout/tagout steps of site safety procedures to ensure machinery will not start.
2. Schedule outage with operating personnel.
3. Follow site safety procedures and your supervisor's instructions.
4. Record and report to your supervisor any equipment damage or deficiencies found during this maintenance task.
5. Record results in the component maintenance log.
6. Obtain and review manufacturer's operation and maintenance instructions.

PROCEDURES FOR INSPECTING THE CIRCULATING PUMP (SEMI-ANNUAL):

1. Tag out unit.
2. Clean and inspect circulating pump.
 - a. Clean accumulated dirt and grime from pump casing, shaft coupling, and motor.
 - b. Inspect electrical wiring, motor, and controls for signs of over-heating, broken insulation, loose or corroded connections, or damaged conduit.
 - c. Check for evidence of leaks.
3. Lubricate pump (lubricated bearings only).
4. Operational test of the circulating pump.
 - a. Start pump. Check flanges and fittings for leaks.
 - b. Check for unusual noise or vibration.
 - c. Return the unit to service.
6. Complete motor and controller procedures (below).
7. Remove tag, test operate and return to service.

TOOLS, MATERIALS, AND EQUIPMENT FOR CENTRIFUGAL PUMP (SEMI ANNUAL):

1. Mechanic's tool set.
2. Ball or roller bearing grease with grease gun.
3. High temperature, electric motor grease with grease gun.
4. Cleaning materials.
5. Ladder.

MOTOR PROCEDURES (ANNUAL):

1. Check ventilation ports for soil accumulation, clean if necessary.
2. Clean exterior of motor surfaces of soil accumulation.
3. Lubricate bearing (not required for sealed bearings).
4. Check motor windings for accumulation of soil. Vacuum if required.
5. Check hold down bolts and grounding straps for tightness.
6. Remove tags and return to service.

TOOLS, MATERIALS, AND EQUIPMENT (ANNUAL):

1. Mechanic's tool set.
2. Cleaning equipment and materials.
3. Lubricants.