

Centrifugal Preventative Maintenance & Inspection Reference Guide



Operational Safety

- Lock-Out/Tag-Out: Always disconnect and lock out power before inspection.
- System Prep: Close suction and discharge valves. Drain the pump and neutralize any hazardous chemical residue.
- Startup Warning: Never run a Price Pump dry. Ensure the pump is fully primed and the seal area is flooded to prevent catastrophic failure.

Preventative Maintenance Schedule

Please note that each application is different, and PM schedules vary based on application. This is a general guideline.

Frequency	Action Item	Inspection Criteria
Daily	Visual Walk-around	Check for signs of leakage at the bracket and pipe joints.
Daily	Auditory Check	Listen for "marbles in the pump" sound (indicates cavitation) or high-pitched squealing.
Weekly	Performance Log	Record discharge pressure and flow. A 10% drop suggests internal wear or suction clogging.
Monthly	Motor Health	Clean motor cooling fins. Debris buildup causes heat-related bearing failure.
Quarterly	Hardware Audit	Check foundation/mounting bolts and piping supports for vibration-induced loosening.

Critical Periodic Inspections

Leak Check: The bracket of a Price Pump features an access slot.

- Dry: Indicates the seal is functioning correctly.
- Intermittent Drip: Early sign of seal face wear; schedule maintenance.
- Steady Stream: Immediate failure. Replace seal before liquid reaches the motor bearings.

Impeller & Volute Inspection: During any teardown or seal replacement, remember to inspect the following:

- Erosion/Pitting: Look for "honeycombing" on the impeller vanes, typically caused by cavitation or abrasive fluids.
- Clearance: Check the gap between the impeller and the volute. Excessive clearance due to wear will significantly reduce pump efficiency and head pressure.
- Debris: Remove any solids lodged in the impeller eyes or vanes that can cause hydraulic imbalance and vibration.

Troubleshooting Preventative Failures

- Excessive Heat: Usually caused by running against a closed discharge valve (dead-heading) or bearing friction.
- Rapid Seal Wear: Often caused by "Abrasive Lag"—solids settling in the pump during shutdown. Always flush the pump with water/neutralizer if the system will be idle.
- Noise (Cavitation): Ensure the suction strainer is clean and the NPSH (Net Positive Suction Head) available meets Price Pump's requirements for your specific model.

Storage & Long-Term Care

If the pump is removed from service for more than 30 days:

1. Drain & Flush: Remove all process chemicals.
2. Coat: Apply a light coat of protective oil to internal cast iron parts to prevent "rust-binding."
3. Rotate: Manually turn the shaft by hand 10–15 revolutions every month to keep seal faces from bonding and to redistribute bearing grease.

For specific assembly clearances and part numbers, consult the IOM manual for your specific model at www.pricepump.com/manuals