



Pacer Pump Troubleshooting Guide

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| CUSTOMER PROBLEM | POSSIBLE CAUSE | SOLUTION |
|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pump will not prime or pump. | 1. not primed | 1. fill pump with clean liquid and restart |
| | 2. air leaks at suction line | 2. use 6 to 10 wraps of teflon tape or liquid teflon on all pump port fittings |
| | | 2. fittings should be hand tight plus one full turn |
| | | 2. replace any torn or damaged suction lines |
| | | 2. check for worn gasket in suction hose coupling |
| | 3. motor or engine RPM's or horsepower are not correct | 3. compare pump requirements with data on engine or motor 3. be sure engine is off the idle setting |
| | 4. internal damage or worn parts | 4. open pump end and inspect, replace worn parts |
| | 5. high suction lift | 5. place pump as close to liquid as possible, max lift is 25 feet at 3,800 RPM |
| 5. keep suction line length under 25 feet, industry standard is 20 feet | | |
| 5. high elevation and high temperature can reduce suction lift | | |
| 6. too fine of strainer or filter on suction line | 6. properly size strainer/filter to ensure adequate flow to suction port | |
| 7. obstruction in suction line or impeller | 7. clean suction line or strainer, make sure lines are clear and valves open | |
| | 7. open pump end and inspect, remove debris from impeller area | |
| 8. motor wired incorrectly, incorrect rotation | 8. have electrician check wiring | |
| Pump delivers insufficient flow. | 1. suction line is too long | 1. move pump closer to liquid source, industry standard is 20 feet |
| | 2. suction line diameter is reduced | 2. suction line should be equal to or one size larger than discharge line diameter |
| | | 2. use rigid pipe or non-collapsible hose for suction line |
| | 3. restriction in suction piping (valve, strainer, filter) | 3. properly design and size piping components |
| 4. impeller is turning in wrong direction | 4. rotation should match directional arrow on pump or motor housing | |
| | 4. consult with electrician on proper motor wiring | |
| Mechanical seal is leaking. | 1. pump ran dry | 1. do not run pump without liquid inside |
| | 2. mechanical seal chemically attacked | 2. check corrosion charts or consult factory for chemical compatibility of pump and seal components with liquid being pumped |
| | 3. thermal shock from cold solution contacting dry running hot seal face will cause seal face to shatter | 3. do not dry run pump, if necessary allow temperature to stabilize before re-starting pump |
| | 4. seal worn | 4. mechanical seals have finite life which varies according to liquid and application. Frequent replacement of mechanical seals may be necessary based on specific application. |
| Body or housing is cracked. | 1. Too much torque applied to pipe or hose fitting | 1. use 6 to 10 wraps of teflon tape or liquid teflon on all pump port fittings |
| | | 1. general rule of thumb is hand tight plus one full turn |
| | | 2. avoid rapid shut-off valves |
| | 2. hydraulic shock | 2. do not drive vehicles over hoses while pump is operating |
| | 3. pump left running with discharge valve closed | 2. slowly open and close shut-off valves |
| 3. stop pump when discharge valve is closed or provide bypass line back to source | | |
| 4. pipe stress | 4. use proper independent support for pipe and hoses to reduce stress/strain on hose fittings and pump body | |
| 5. physical abuse | 5. protect pump from impact damage, use roll-cage to prevent toppling | |
| Engine/motor will not work. | 1. engine / motor defect | 1. Contact manufacturer's authorized service center. 1. Call Pacer Pumps at 1-800-233-3861 if you need assistance with finding an authorized service center. |
| | 2. no oil or fuel | 2. check liquid levels and add as needed |
| | 3. on/off switch set to off | 3. position switch to on |
| | 4. fuel shut-off valve closed | 4. open fuel shut-off valve |