

Borehole Pump Not Switching On – Complete Troubleshooting Guide

This branded troubleshooting guide is designed for homeowners, farmers, installers, and technicians who need a clear, step-by-step method to diagnose why a borehole pump is not switching on. It follows the Pumps Africa & Tools standard layout, using clean colours, readable formatting, and structured sections for easy navigation.

1. Common Symptoms

- No sound or vibration from the pump
- No water flow
- Control box lights not switching on
- Circuit breaker tripping immediately
- Pump hums but does not run
- Pump starts then cuts off

2. Step-by-Step Troubleshooting

Step 1: Check Power Supply

Ensure Eskom/municipal power is present, check DB board breakers, test isolators, and replace any damaged plugs or loose wiring.

Step 2: Inspect the Pump Control Box

Look for burnt smell, bulged capacitor, loose terminals, or water damage. Replace capacitor or full control box if needed.

Step 3: Test Pressure Switch / Float Switch

Check for stuck or burnt contacts, stuck floats, or incorrect wiring.

Step 4: Check Voltage Levels

Low voltage causes humming, buzzing, and non-starting. Measure voltage and upgrade cables if necessary.

Step 5: Inspect Motor Protection Devices

Reset overload relays or clear VSD faults.

Step 6: Check Borehole Water Levels

Dry-run protection may prevent pump startup. Allow water level to recover or test float movement.

Step 7: Inspect Wiring & Cable Joins

Check for damaged junction boxes, corroded joints, and faulty splices.

Step 8: Motor or Mechanical Failure

Test motor winding resistance. Replace or rewind burnt motors.

3. Quick Troubleshooting Table

Problem	Likely Cause	Recommended Fix
Pump dead	No power	Reset breaker, check supply
No lights on control box	Faulty control box	Replace capacitor/control box
Pump humming	Low voltage / bad capacitor	Fix voltage / replace capacitor
Pump runs then stops	Overload trip	Reset overload / check motor
No power to pump	Damaged cable or splice	Re-splice / replace cable
Pump won't start	Pressure/float switch fault	Replace switch / correct wiring

4. When to Call a Technician

Call a professional immediately if you notice:

- Burning smell
- Melted insulation
- Control box smoking
- Breaker tripping repeatedly
- Loud buzzing noises
- Water inside control box

5. SEO Tags (Copy & Paste)

borehole pump problems, borehole pump not switching on, pump fault finding, submersible pump issues, pump not starting, capacitor failure pump, dry run protection fault, pump electrical troubleshooting, pump not running, borehole pump repair, pressure switch fault, low voltage pump issue