G4 Solenoid

Installation & Troubleshooting Guide

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P/N 232094

English G4 Solenoid

Thank you for purchasing a Rain Bird G4 Solenoid. This solenoid assembly is compatible with the following Rain Bird valves: PGA, PEB, PESB, EFB-CP, and BPES.

To use this guide, fold out the back page for visual reference then turn to the appropriate language. Follow the alphanumeric references for installation, adjustment, troubleshooting and replacement parts. Specifications can be found on the back of the foldout page.

Installation Refer to F1.

1. WARNING: Turn off water supply and disconnect all electrical power sources.
2. Turn the solenoid counter-clockwise to remove the G4 Solenoid.Ⓑ
3. If desired, use an open-ended wrench to counter-clockwise remove the solenoid adapter.Ⓒ Clockwise replace solenoid adapter into valve bonnet Ⓓ ensuring the o-ring does not become pinched or damaged.
4. Clockwise thread replacement solenoid Ⓑ into the solenoid adapter.Ⓒ
5. Clockwise tighten the solenoid.Ⓑ
6. Connect one solenoid wire Ⓐ to the controller common wire and the other solenoid wire to the controller power wire. Tighten and protect using only approved watertight connectors.

Troubleshooting

Valve will not open.

1. Ensure main water supply is on. Ensure upstream valves are open. Ensure flow control stem is not closed.
2. If valve only opens with manual bleed, ensure controller is programmed to activate the proper zone valve. Test controller power output and service if necessary. Test solenoid power input.
   a) If controller and solenoid power are detected, insert a thin flat screwdriver into the slotted areas of the solenoid bottom and brown solenoid retainer. Gently pry to disengage retainer. Remove plunger assembly and clean debris.

      Replace plunger ensuring black surface faces outward. Snap retainer into place ensuring the larger hole faces outward. Persistent problem may be an obstruction lodged in main pipe.
   b) If power is detected at the controller and not the solenoid, inspect and repair damaged lead wires.

Valve will not close.

1. Ensure controller is not operating the valve automatically. Ensure manual internal bleed is off by clockwise tightening the solenoid adapter. Ensure manual external bleed is off by clockwise tightening the valve bleed screw.
2. Turn off water supply and swap solenoid from an operational valve; replace solenoid if necessary.
3. Turn off water supply and verify that the solenoid adapter o-ring is not damaged; replace if necessary. Check for debris in solenoid bowl preventing plunger from creating a positive seal.
4. Check overall system water-pressure requirements and ensure that multiple zone valves are not operating simultaneously. Disallowing one zone valve to close before another opens can reduce the amount of backpressure needed to close the diaphragm.
5. Turn off water supply and remove bonnet for possible debris or damage causing the diaphragm to stick open.

Leakage.

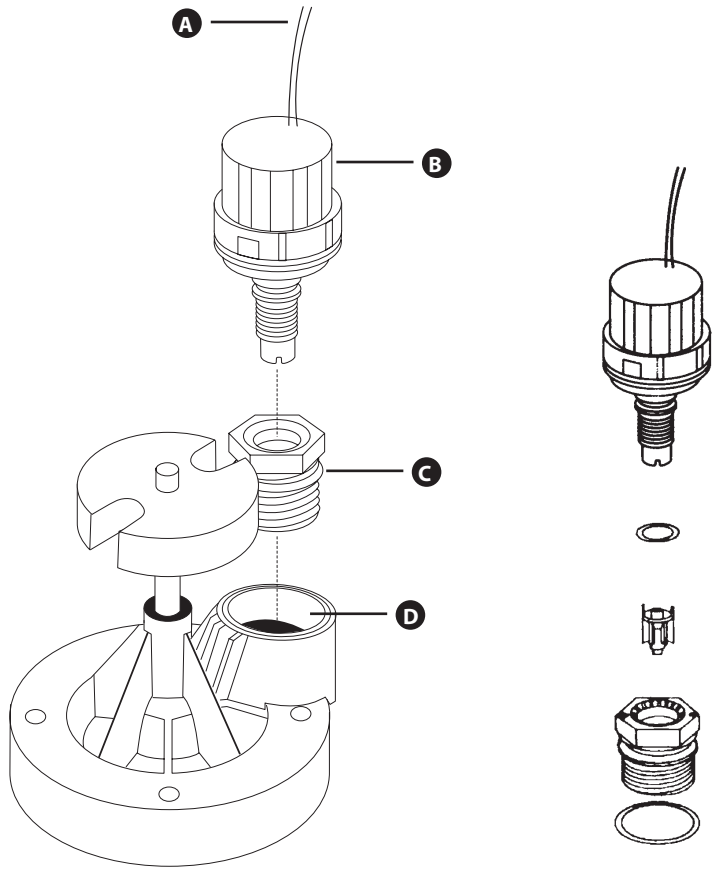
1. Disassemble parts and inspect o-rings/sealing surfaces for damage. Check replacement parts exploded view for missing or replacement parts.

Accessories or persistent problems.

1. Refer to the appropriate installation and operation manual for specific troubleshooting procedures
2. Inside the US, please call the Rain Bird Spec Hotline at (800) 458-3005.
3. Outside the US, please refer to the back page for contact information.
4. Always visit us at www.rainbird.com.

Electrical Specifications

- 24VAC 50/60Hz (cycles/sec) solenoid
- Inrush current: 0.41A (9.9VA) at 50/60Hz
- Holding current: 0.14A (3.43VA) at 50/60Hz
- Coil resistance 30-39 ohms nominal



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