Golf course irrigation systems operate in a dynamic and challenging environment. There are many things that can affect the performance of the system. This Troubleshooting Guide is designed to assist you in finding solutions for performance challenges that may randomly affect Rain Bird® golf rotors.

For additional information about the troubleshooting procedures included in this guide — or for answers to any of your questions at any time — contact your local Rain Bird Golf Distributor.
Recommended Rain Bird®
Troubleshooting Procedure for
“Stuck ON”
Electric Rotor

START

No Fault Found

Rotor turns “OFF”

Electrically shut off the rotor.

Rotor stays “ON”

Verify that the power is shut off to the solenoid at the controller.

If power is “OFF”

If power is “ON”

Service Solenoid/PRS Assembly

Rotor turns “OFF”

Turn selector on PRS to “OFF.”

Rotor stays “ON”

Isolate water supply to rotor.

Clean valve by flushing with water, replace universal filter and reinstall valve.

Filter damaged/clogged

Filter OK

Pressurize water supply to rotor.

Replace with NEW valve.

Filtration System May Be Inadequate

No fault found, remove unit from ground, collect required data and send unit back to Rain Bird for evaluation.

* May require you to dig out the case assembly. Proceed with care.
Recommended Rain Bird®
Troubleshooting Procedure for
“Stuck ON” IC Rotor

No Fault Found

- No fault found, remove unit from ground, collect required data and send unit back to Rain Bird for evaluation.

Get Fault Found

- Rotor turns “OFF”
- Electrically shut off the rotor.
- Rotor stays “ON”
- Confirm ICI is powered and central control software is running.

- Rotor stays “ON”
- Isolate water supply to rotor.
- Filter OK
- Filter damaged/clogged
- Clean valve by flushing with water, replace universal filter and reinstall valve.
- Pressurize water supply to rotor.
- Rotor turns “OFF”
- Rotor stays “ON”
- Replace with NEW valve.

- Low/No current draw.
- Isolate water supply to rotor.
- Service ICM/PRS Assembly

- Not fault found, remove unit from ground, collect required data and send unit back to Rain Bird for evaluation.

* May require you to dig out the case assembly. Proceed with care.
No Fault Found

Operate rotor and verify the unit weeps.

Still Weeps

Loose Lock Nut

Tighten PRS Lock Nut.

Still Weeps

Replace Inlet Seal or Flip Over and Reinstall

Isolate rotor, carefully remove the internal, valve and TSRS. Inspect rubber inlet seal for damage.

No Damage Found. Still Weeps. Replace Inlet Seal.

Isolate rotor, carefully remove the internal, valve and TSRS. Inspect rubber inlet seal for damage.

Damage Found

Replace TSRS

Isolate TSRS seat surface for any other damage.

No Damage Found. Still Weeps. Replace TSRS.

Replace Valve

Inspect valve for cracks near each vent slot, under the elbow probe and either side of the elbow probe hole.


Replace Selector Seal

Isolate rotor, remove PRS lock nut and inspect the selector seal for damage.

No Damage Found. Still Weeps. Reinstall Selector Seal.

Replace Any Damaged Components, Flush Out Assembly and Reassemble

Remove GB2S2 solenoid and inspect filter, volcano, o-ring and return spring for debris or damage.

No Damage Found, Reassemble. Still weeps.

Replace Case Assembly

Dig out larger area to expose control tubing. Inspect for cracked or leaking elbows, tubes and PRS assembly.

No Damage Found

Unable to determine cause of weeping.

No fault found, remove unit from ground, collect required data and send unit back to Rain Bird for evaluation.
**Recommended Rain Bird® Troubleshooting Procedure for “Weeps When OFF” IC Rotor**

**START**

1. **No Fault Found**
   - Operate rotor and verify the unit weeps.
   - **Still Weeps**

2. **Loose Lock Nut**
   - Tighten PRS Lock Nut.
   - **Still Weeps**

3. **Replace Inlet Seal or Flip Over and Reinstall**
   - Isolate rotor, carefully remove the internal, valve and TSRS. Inspect rubber inlet seal for damage.
   - **No Damage Found. Still Weeps.**
   - Reinstall Seal.

4. **Replace TSRS**
   - Inspect TSRS seat surface for any other damage.
   - **No Damage Found. Still Weeps.**
   - Reinstall TSRS.

5. **Replace Valve**
   - Inspect valve for cracks near each vent slot, under the elbow probe and either side of the elbow probe hole.
   - **No Damage Found. Still Weeps.**
   - Reinstall Valve.

6. **Replace Selector Seal**
   - Isolate rotor, remove PRS lock nut and inspect the selector seal for damage.
   - **No Damage Found. Still Weeps.**
   - Reinstall PRS.

7. **Replace Any Damaged Components, Flush Out Assembly and Reassemble**
   - Remove ICM and inspect volcano, o-ring, and core tube for debris or damage.
   - **No damage found. Reassemble. Still weeps.**

8. **Replace Case Assembly**
   - Dig out larger area to expose control tubing. Inspect for cracked or leaking elbows, tubes and PRS assembly.
   - **No Damage Found**

9. **Unable to determine cause of weeping.**
   - **No fault found, remove unit from ground, collect required data and send unit back to Rain Bird for evaluation.**
Recommended Rain Bird® Troubleshooting Procedure for

“Won’t Turn ON” Electric Rotor

START

Turn On Water Pressure

- Rotor Has No Water Pressure
  - Verify there is water pressure at rotor.
  - Rotor Pressurized

No Fault Found

- Rotor Turns On
  - Electrically activate rotor.
  - Rotor Still Off

If No Power, Turn Power On

Repair/Replace Bad Wiring

- Solenoid OK
  - Check Solenoid Wiring At Head
    - Wiring Faulty
    - Wiring OK

Solenoide Bad

Check Solenoid Wiring At Head

- Replace Solenoid

Service/Replace PRS Assembly

- Rotor Turns On

Replace Spring and Plunger Assembly

- Jammed Plunger
  - Remove GBS25 solenoid and check for jammed plunger.
  - No Jammed Plunger

- Problem Resolved
  - Rotor Turns On

Collect Required Data and Send Valve Back to Rain Bird for Evaluation

- Rotor Pressurized

No fault found, remove unit from ground, collect required data and send unit back to Rain Bird for evaluation.
Recommended Rain Bird®
Troubleshooting Procedure for
“Won’t Turn ON”
IC Rotor

Confirm ICI is powered and central control software is running.

Both are “ON”.

Excavate around ICM lead wires and confirm proper current draw with Fluke 368 clamp meter *

May require you to dig out the case assembly. Proceed with care.

Remove PRS retaining nut, internal and valve. Using a portable compressed air/water tank and long blow tip, clear exhaust tubing by blowing down through the center hole in PRS housing. Clear high pressure tubing by blowing down through the manual port. Reverse the procedure and blow up from bottom of case through exhaust hole and valve probe. Rinse all components, reassemble and test rotor.

Collect Required Data and Send Valve Back to Rain Bird for Evaluation

No fault found, remove unit from ground, collect required data and send unit back to Rain Bird for evaluation.

* May require you to dig out the case assembly. Proceed with care.
Check Pump Station Operation

Operate rotor individually to verify non-rotation.

Check pressure in the lateral while the rotor is operating.

Check Pump Station Operation

Line Pressure is Low

Check pressure in the lateral while the rotor is operating.

Check Pump Station Operation

Line Pressure is OK

Remove the internal and check for clogged or blocked screen. Remove nozzle housing and check for blocked nozzles.

Clean Screen and/or Nozzles; Reinstall Internal

Screen and/or Nozzles Blocked

Screen Not Blocked or Clogged

Replace Stator with Correct Configuration

Wrong Stator

Stator Correct

Remove Debris or Blockages. Replace Internal if Necessary

Turbine Won’t Turn or Difficult to Turn

Remove screen and stator. Check turbine to make sure it is freely turning.

Turbine Turns Freely

Remove Rock Screen and Flush the Lateral

Rock Screen is Blocked with Rocks or Debris

Rock Screen Free of Debris That Would Limit the Flow of Irrigation Water to the Rotor.

No fault found, replace the internal, collect required data and send the internal back to Rain Bird for evaluation.
Rotor Components

- PRS Nut
- Turbine
- Screen
- Valve
- Universal Filter
- Selector Seal
- Volcano
- High Pressure Tube
- Low Pressure Tube
- Retract Spring
- G825/ICM Solenoid
- Universal Filter
- Valve Seal
- TSRS
Suggested Tool List

Before initiating the troubleshooting process, it is suggested that you have the following tools with you:

- Philips Screwdriver
- Pressurized Air or Water Tank
- Shovel
- Clamp Meter (Fluke 368)
- Multimeter
- ¾” Drive, 16” long socket extension
- ¾” Ratchet

- Y05100 – Rotor Tool
- D02203 – Snap-Ring Pliers 900/950/1100/1150
- D02236 – Snap-Ring Pliers 551/700/751
- B41710 – Valve Insertion Tool 551/700/751
- B41730 – Valve Insertion Tool 900/950
- B41720 – Selector Service Tool/Key
- D02237 – Installation Socket for Top-Serviceable Rock Screen
- D02215 – 7” Selector Valve Key
- D02221 – 18” Selector Valve Key
- D02221 – 18” Selector Valve Key
- D02215 – 7” Selector Valve Key
Discover the TRUE Benefits™ of a Rain Bird System

Timeless Compatibility
Rain Bird golf irrigation products make it easy and affordable to maintain a state-of-the-art irrigation system that updates as your course does.

Real-Time Response
Get automatic optimization between your Central Control and the field with continuous two-way communication.

Unmatched Quality
In engineering, design and testing, Rain Bird rigorously tests every product to stand up to the world's harshest conditions.

Easy To Use
From software interfaces to rotor designs, Rain Bird products help you and your crew find a quicker, hassle-free path to top playability.

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