Polaris 9300/9300xi Diagnostic Instructions

**WARNING**

**FOR YOUR SAFETY** - This product must be serviced by a contractor who is licensed and qualified in pool equipment by the jurisdiction in which the product will be installed where such state or local requirements exists. In the event no such state or local requirement exists, the installer or maintainer must be a professional with sufficient experience in pool equipment installation and maintenance so that all of the instructions in this manual can be followed exactly. Before installing this product, read and follow all warning notices and instructions that accompany this product. Failure to follow warning notices and instructions may result in property damage, personal injury, or death. Improper installation and/or operation will void the warranty.

Improper installation and/or operation can create unwanted electrical hazard which can cause serious injury, property damage, or death.

Connect unit to receptacle protected by a ground fault circuit interrupter (GFCI). Such a GFCI receptacle should be provided by a qualified installer and should be tested on a routine basis. To test the GFCI, push the test button. The GFCI should interrupt power. Push the reset button. Power should be restored. If the GFCI fails to operate in this manner, the GFCI is defective. If the GFCI interrupts power to the pump without the test button being pushed, a ground current is flowing, indicating the possibility of an electric shock. Do not use this product. Disconnect the cleaner and have the problem corrected by a qualified service representative before using.

**KEEP OUT OF REACH OF CHILDREN**

1. **Introduction**

   This document gives diagnostic testing instructions for the 9300/9300xi Sport.

   The instructions were written with safety as the priority and must be followed exactly. Not following the written procedure or taking shortcuts may increase the risk of personal injury. Read through the instructions completely before starting the procedure.

2. **Diagnostic Instructions**

   The customer must provide the following items to perform the diagnostic testing:

   - Control Unit
   - Cleaner Head with Floating Cable

   ![Figure 1. Polaris Quick Diagnostic Test Box](image)
A. Testing Cleaner Head and Floating Cable

1. Set the cleaner head on a block of wood or some object that allows the cleaner wheels to be elevated from the surface.

2. Plug the Polaris Quick Diagnostic Test Box into a GFCI protected outlet.

3. Connect the floating cable from the cleaner to the test box (see Figure 2).

4. Determine the corresponding button for the model being diagnosed (9300 or 9300xi). Press the button to start the test (see Figure 3).

5. The pump motor should start first. Check for air flowing from the exhaust on the back end of the cleaner (see Figure 4).

6. Next, the drive motors should start within five (5) seconds after the pump motor starts. Take note which direction the drive motors are rotating. The drive motors drive the two (2) front wheels. Verify that the two (2) front drive wheels move forward then in reverse. After ten (10) seconds, all motors should stop.

7. If the cycle completes without flashing lights, the floating cable and cleaner head have successfully passed the test.

8. If the diagnostic box flashes red lights at any time during the test or the cleaner head does not activate, proceed to Section C: Diagnosing a Defective Motor Block or Floating Cable.

B. Testing the Control Unit

1. Reconnect the cleaner to the customer’s control unit. Press the Cycle I button. (see Figure 5).

2. The drive cycle will turn on and will last for approximately five (5) seconds.

3. The cleaner will then drive forward for approximately five (5) seconds. If the cleaner does not drive forward for approximately five (5) seconds, then the control unit is defective and must be replaced.
4. If the pump and drive motors drive, the control unit has passed the test successfully. Turn off the power to the control unit.

**NOTE** The control unit is programmed to shut down power to the cleaner head within ten (10) seconds in order to protect the motor from damage.

C. Diagnosing a Defective Motor Block or Floating Cable

1. Open the cleaner top and remove the filter canister. Unthread the screw securing the prop guard in place and remove the propeller guard (see Figure 6).

2. Remove the propeller and the flow director (see Figure 7).

3. Close the cover and turn the cleaner over so that it's resting on its top.

4. Remove the four (4) screws from the bottom of the cleaner. Remove the bottom plate/motor block (see Figure 8).

5. Disconnect the floating power cable from the motor block by removing the two screws connecting the cable to the block, then pulling the plug away from the block (see Figure 9).
6. Using the short test cable, connect the motor block to the Polaris Quick Diagnostic Test Box (see Figure 10).

7. Once secured, start the diagnostic test (see Figure 11).

8. If the test completes without flashing red lights, then the cable is defective. Replace the floating cable.

9. If the test ends with flashing red lights on the diagnostic panel, then the motor block is defective. Replace the motor block and return old motor to Zodiac.