

## Testing PMD's, Control Solenoids and wiring harnesses

Tools Required: Multi-meter with diode testing capabilities

1. Set the multi-meter to the diode testing mode(looks like an arrow pointing to a sideways T, usually the same setting as a continuity test). Be sure to install the test leads – red to positive, black to negative.
2. Connect negative lead to the ground terminal of the injection pump (under top cover screw)
3. Pull control solenoid boot back to expose the two control solenoid terminals
4. Disconnect wiring harness from PMD
5. Connect the red lead of the meter to the red wire of the control solenoid (Image 1)
  - a. If meter reading is less than 0.2 volts the electrical continuity of the control solenoid is correct. Reconnect harness to PMD and continue to step 6
  - b. If the meter reading is greater than 0.2 volts the voltage is incorrect. Proceed to step 7.
6. Connect the red lead to terminal “C”(pink with black stripe) of the gray connector
  - a. Reading of greater than 1.4 volts means the PMD is good for testing
  - b. Reading less than 1.4 volts indicates an internal short in the PMD and means the PMD SHOULD NOT BE TESTED.

*Note: This test does not mean your pmd is not bad, it simply dictates if the pmd can be tested with the Stanadyne test equipment without damaging the test equipment. If it fails this test however it does mean the PMD is bad.*

*Note: Step 7 is only done if the reading in step 5 was greater than 0.2 volts*

7. Connect the red lead of the meter to the black terminal of the control solenoid
  - a. A meter reading greater than 0.2 volts indicates a defective pump wiring harness. Replace harness and start from step 4.
  - b. If reading is less than 0.2 volts, the harness is good and the control solenoid is bad. Proceed to step 8
8. Connect the red lead of the meter to terminal “C” of the gray harness connector. Connect the black lead of the meter to the red control solenoid lead.
  - a. If the reading is greater than 1.4 volts, the control solenoid is defective. Replace control solenoid during rebuild.
  - b. If the meter is less than 1.4 volts, the PMD and control solenoid are defective. Replace both during rebuild.

IMAGE -1

- A - Green
- B - Red
- C - Black
- D - Pink/Black Stripe
- E - Red
- F - Black



Control Solenoid