



# StanCo Scientific Inc.

## SSD7105 Pickup, Cable and Meter resistance readout

The SSD7105 is a practical tool for the technician to use to test both the pickup when it is mounted on the engine both cold and hot, the Knockmeter and the pickup cable. The device allows the operator to see if the pickup is fit for use according to the manufacturers recommendations by simply removing the pickup cable from the rear of the meter and connecting it to the device. Due to the heat and moving mechanical parts the testing of pickups can be potentially hazardous for the beginner. The SSD7105 makes the testing of both the pickup and the knock meter very easy and straight forward.

### Testing the knock meter:

Open the console and disconnect the cable that goes from the knock meter to the 501 or SSD7000. Connect it to the SSD7105. Turn on the SSD7105 and observe the number on the display. You should see a value of 8.6 +/- 15% Ohms. (7.31 to 9.89 ohms) The value is an approximate due to Scale of the readout. If the value falls into this range then the meter is fit for service. The exception is the Weshler meters which are 32 ohms approximately, they are good if in the 32ohm range.

### Testing the D1:

As above we open the panel and this time disconnect the cable that goes to the D1 pickup. When you plug it in you should quickly see the combined resistance of both the cable and the pickup. The added resistance of the pickup cable should not be much in the way of ohms but could be a factor. We will test this separately later with the SSD7105. Once connected to the cable and the engine cold you should see a cold resistance for the pickup which is listed on the front of the SSD7105 or below.

D1 Cold resistance = 480 Ohms +/-100 Ohms

D1 Hot resistance = 650 Ohms +/-100 Ohms

### Testing the Pick up cable.

This is going to be fairly straight forward. Remove the cable end from the pickup, connect the other end to the SSD7105. The value on the display will be a 1 in the far left of the screen. Remove the red test cable from the kit and plug the pin end into the tip of the pickup cable end. The clip the alligator clip to the silver body of the pickup end. At this point you should see a number on the SSD7105 display the value should be close to Zero. If not you will have a bad solder joint in the cable. You can at while the cable is connected to the meter test to see if there are any poor connections by wiggling the cable while it is connected to the SSD7105. You should see instantly any opens in the circuit as the meter will jump from low resistance to a one at the left.



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**Once finished with testing return all connections to their correct positions and return the engine to normal operation.**



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## Sample Pickup Evaluation sheet

Date	Pickup Serial #	Cold Resistance	Hot Resistance	Remarks