

Testing The Oxygen Sensor On The Kaw 16 HP

Test with sensor disconnected from engine			
Test A	White wire	Black wire	Gray & White wires
White (Engine cold and off)	NA	Open	Shorted
Black (Engine cold and off)	Open	NA	Open
Gray & White wires (Engine cold and off)	Shorted	Open	NA
Measure voltage of sensor with engine hot and running. Sensor should connected to engine.			
Test B	Red/Yellow wire	Blue/Yellow wire	Black/Yellow wire
Red/Yellow wire (Hot)	NA	12 to 14 volts	12 to 14 volts
Blue/Yellow (Hot)	12 to 14 volts	NA	.050 to .060 Volts (See Note Below)
Black/Yellow (Hot)	12 to 14 volts	.050 to .060 Volts (See Note Below)	NA
<p>The Oxygen Sensor's voltage will vary from 0.0 to 0.110 volts between the Blue/Yellow and Black/yellow wires during warm-up. Depending on rich or lean conditions. The Mscses unit controls fuel mixture which affects the voltage output of the sensor. The Mscses strives to maintain voltage at 0.055 volts. Voltage will fluctuate between 0.050 to 0.060 volts under normal conditions. Most mscses must be able to adjust the mixture before 90 seconds or engine will be shut down. The mscses will shut off the fuel lock out solenoid, cutting off fuel to engine. Some units will vary from 60 to 120 seconds. The heater function in the oxygen sensor is critical in order for proper warm up to occur. Short between the pin with white and black wires to the pin with the single white wire is essential on test A. If these test open the heater has failed. Replace the sensor. If no voltage is present after engine warms up between the blue/yellow and the black/yellow wires on test B, replace the oxygen sensor.</p>			
<p>If 12 to 14 volts is not present across the red/yellow and black/yellow, check connections between mscses and oxygen sensor, going to mscses, and battery voltage (12 volts min).</p>			