

Reprogram or update the calibration. Clear the DTCs, repeat the self-test. If the DTC is retrieved again, install a new PCM. Refer to FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ ONLY MEMORY (EEPROM) .

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
All	Refer to the Description, Possible Causes and Diagnostic Aids for the DTC.		

DIAGNOSTIC TROUBLE CODE (DTC) CHARTS AND DESCRIPTIONS > P1647 - LINEAR O2 SENSOR CONTROL CHIP (BANK 2) - DTC CHART

P1647 - LINEAR O2 SENSOR CONTROL CHIP (BANK 2) - DTC CHART

Description: The PCM monitors the application specific integrated circuit that controls and monitors the universal heated oxygen sensor bank 2, sensor 1 (HO2S21). This DTC sets when the PCM detects an internal circuit or communication concern.

Possible Causes:

- Damaged universal HO2S21 wiring
- Damaged PCM

Diagnostic Aids: Check for other DTCs and diagnose those first. Check for intermittent universal HO2S wiring concerns. Check the universal HO2S wiring between the PCM and the sensor for damage. Check for aftermarket performance products. Reprogram or update the calibration. Clear the DTCs, repeat the self-test. If the DTC is retrieved again, install a new PCM. Refer to FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ ONLY MEMORY (EEPROM) .

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
All	Refer to the Description, Possible Causes and Diagnostic Aids for the DTC.		

DIAGNOSTIC TROUBLE CODE (DTC) CHARTS AND DESCRIPTIONS > P164A - O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT PERFORMANCE (BANK 1 SENSOR 1) - DTC CHART

P164A - O2 SENSOR POSITIVE CURRENT TRIM CIRCUIT PERFORMANCE (BANK 1 SENSOR 1) - DTC CHART

Description: A resistor is installed in the universal heated oxygen sensor bank 1, sensor 1 (HO2S11) connector for part to part variance. The PCM determines the value of this resistor by taking multiple measurements of the resistor during each ignition ON event. The PCM uses this value to compensate for the variance in the pumping current signal. This DTC sets when the PCM receives an inconsistent or erratic measurement of the resistor.