5.35 VEHICLE SPEED SENSOR ANTI-TAMPERING

VSS Anti-tampering can be used to detect fixed frequency oscillators or devices which track engine RPM and produce fewer pulses per revolution than a VSS wheel. These devices are used to trick the CPC into believing that vehicle speed is low.

A VSS fault will be logged if the sensor appears to be working improperly but the vehicle speed is not zero. The engine speed in all gears will be limited for the duration of the ignition cycle to the engine speed at the Vehicle Speed Limit in top gear.

This feature should only be enabled on installations with manual transmissions where a Vehicle Speed Sensor is wired directly to the CPC.

NOTE:
Do Not use VSS anti-tampering with SAE J1939, automatic, semi-automatic, or torque converter transmissions.

NOTE:
Default #4 (4 = Magnetic Pickup) is required for anti-tampering to function.

5.35.1 PROGRAMMING FLEXIBILITY

Vehicle Speed Limiting must also be enabled. The parameters are listed in Table 5-125.

Parameter Group	Parameter	Range	Default	Access
8	Anti Tamper	0 = Disable 1 = Enable Anti Tamper Function via ABS 2 = Enable Anti Tamper Function via Gear Ratio	0	DDDL 7.0, VEPS, DRS
8	Vehicle Speed Sensor	0 = No Sensor 1 = C3 Sensor 2 = Square Wave (Hall Sensor) 3 = J1939 (ETC1) 4 = Magnetic Pickup 5 = J1939 (TCO1) 6 = J1939 (CCVS) Source 1 87 = J1939 (CCVS) Source 2 8 = J1939 (CCVS) Source 3	4	DDDL 7.0, DRS, VEPS
8	Axle Ratio	1.00 - 20.00	5.29	DDDL 7.0, DRS, VEPS
8	Number of Output Shaft Teeth	0 - 250	16	DDDL 7.0, VEPS, DRS
8	Tire Revolutions per Distance	160 - 1599	312	DDDL 7.0, VEPS, DRS
8	Top Gear Ratio	0.1 - 2.55	1	DDDL 7.0, VEPS, DRS
8	Second Highest Gear Ratio	0.1 - 2.55	2.55	DDDL 7.0, DRS, VEPS

Table 5-125   VSS Anti-tampering Parameters