NO: 18-15-99

SUBJECT: Change To Oxygen Sensor Biasing / Switching At Idle With Neutral Or Park Selected

DATE: June 18, 1999

NOTE: THIS BULLETIN APPLIES TO VEHICLES EQUIPPED WITH A 4.7L ENGINE AND BUILT AFTER APRIL 20, 1999 (MDH 0420XX). THIS BULLETIN WILL APPLY TO EARLIER BUILT VEHICLES THAT HAVE HAD THE SOFTWARE OF THE POWERTRAIN CONTROL MODULE (PCM) REPROGRAMMED TO 99CAL18 OR HIGHER.

DISCUSSION:

Several revisions have been made to the idle strategy of the 4.7L engine. One change is to the upstream oxygen sensor (O2) biasing / switching when the transmission is in Park or Neutral.

A review of warranty has revealed erroneous replacement of upstream O2 sensor(s). This may be caused by misdiagnosis of O2 activity. Technical Service Bulletin (TSB) #18-31-98 was released September 25, 1998 to address the unique upstream O2 biasing / switching strategy of the WJ 4.7L engine. Basically, the TSB 18-31-98 stated that the O2 sensor will be biased rich when the engine is at idle and the transmission is in Park or Neutral.

If not familiar with the original upstream O2 sensor biasing strategy, the technician may notice very little O2 sensor switching and may erroneously replace the O2 sensor because of O2 sensor inactivity.

With the newly revised idle strategy, the technician will notice more frequent switching (less rich biasing) of the upstream O2 sensors when the engine is at idle and the transmission is in Park or Neutral. Idle quality is not impacted by this revision.

The revised WJ 4.7L idle strategy is implemented in 99Cal18. Using the DRB III[®] scan tool, the technician can determine the PCM calibration level by viewing the scan tool MODULE DISPLAY screen.

POLICY: Information Only