**Section 460.320 Snap-Acceleration Inspection Procedures**

With the vehicle prepared as described in Section 460.300 and the equipment set up as described in Section 460.310, the snap-acceleration inspection shall be executed as follows:

a) With the engine at normal operating temperature and at low idle speed, the CDET shall move the accelerator to the fully opened position as quickly as possible.

b) The CDET shall hold the accelerator in the fully opened position until the engine reaches its maximum governed speed, plus an additional 1 to 4 seconds, or as prompted by the display on the smoke opacimeter.

c) After completing the snap-acceleration of the engine operating at maximum governed speed for 1 to 4 seconds, the CDET shall release the accelerator and allow the engine to return to low idle speed.

d) Allow the engine to remain at low idle speed for 5 to 45 seconds or as prompted by the display on the smoke opacimeter.

e) Repeat steps (a) through (d) two additional times, for a total of three snap-acceleration cycles.

f) These three snap-accelerations are preliminary cycles that allow CDETs to become familiar with the engine's acceleration and also remove loose soot from the vehicle exhaust system. The three preliminary cycles can also be used to check for proper operation of the smoke opacimeter.

g) Within 2 minutes after the preliminary snap-acceleration cycles or as prompted by the smoke opacimeter, the CDET shall execute three snap-accelerations in the same manner as described in subsections (a) through (d) of this Section for the preliminary acceleration cycles.

h) The percentage of opacity for the three snap-accelerations must be within 5% of each other for the inspection to be valid.

i) If the smoke opacimeter display announces a valid inspection, document the inspection results as instructed in Section 460.330, Reporting of Inspection Results.

j) If the test was invalid due to readings that varied by more than 5% or any other condition that would render the inspection invalid, repeat the entire inspection as outlined in Subpart C of this Part.