

Miscellaneous Smog Check Exam Information

1. Hang-Up Check:

- a. Immediately prior to each test the analyzer automatically performs a hydrocarbon (HC) hang-up check.
- b. If the HC reading at the probe sampling ambient air exceeds 20ppm, the system must be purged with clean air or zero gas.
- c. The analyzer will not allow the smog test to proceed until HC levels drop below 20ppm
- d. Causes of Hang-Up Check failure:
 - i. Probe in tailpipe during hang-up check (remove probe and retest)
 - ii. Vehicle parked on sample line (move vehicle)
 - iii. Dirty filters in analyzer (replace filters)

2. Automatic Zero Span:

- a. Conducted prior to each smog test.
- b. Leave Zero air bottle valve open so analyzer can perform this test.

3. Causes of "Low Flow Warning":

- a. Restriction in hose
- b. Kinked hose
- c. Vehicle parked on sample hose
- d. Plugged filters

4. Sample dilution

- a. Rust holes in muffler or tailpipe (insert probe in holes and or plug tailpipe with a rag)
- b. Probe fell out of tailpipe

5. Safety procedures Basic two speed idle test (TSI)

- a. Chock wheels before testing
- b. Check vehicle for safety concerns (i.e. Fuel leaks, radiator hoses, etc.)

6. Safety procedures Acceleration Simulation Mode (ASM)

- a. Check tire pressures
- b. Check tire condition (Vehicle Must Be Testable) Damaged or worn tire (2/32nd tread depth) is not safe to run on dyne.
- c. Wet tires must be dried by running on dyne at low speed before testing (prompted by EIS)
- d. Restrain vehicle:
 - i. Front wheel drive must be cross strapped to dyne with wheel chocks on rear wheels.
 - ii. Rear wheel drive must have front wheels chocked, cross straps are not necessary.
 - iii. Adjust dyne roller-restraints for vehicle.
 - iv. Close hood before running ASM smog test.

Miscellaneous Smog Check Exam Information

7. ASM Testing

- a. Position cooling fan in front of radiator if ambient temperature is above 72 degrees.
- b. Test automatic transmission in Drive; do not engage any special mode such as sport mode.
- c. Test manual transmission in second gear.
- d. Conduct test as prompted by analyzer.

8. Hybrid Testing

- a. Safety Equipment:
 1. Insulating gloves are critical PPE for electrical work on or near exposed energized parts.
 2. Gloves must meet the Class 0 Standard
 3. Gloves must be properly stored (not folded) in a safe, dry environment out of sunlight.
 4. Gloves must be visually inspected and need to be air tested for any possible defects (for example, cuts, holes, tears, embedded objects, changes in texture) before each day's use and whenever there is a reason to believe they may have been damaged.
 5. insulating gloves need to be worn along with protector gloves (such as leather).
 6. Gloves must be electrically tested at regular intervals of not more than 6 months.
 7. Wear safety glasses.
- b. Vehicle Testing
 1. Test 2000 and newer Hybrids on OIS only.
 2. No visible smoke test on Hybrids.
 3. Liquid fuel test performed with KOEO, to pressurize the fuel system.
 4. Aftermarket parts will require an EO Number.
- c. Be aware that Hybrid Warranties may be as high as 150,000 miles and 15 years.