

Bottle Mounting:

Bottles must be mounted outside of the engine compartment. Any bottle located in the driver's compartment must be mounted with metal brackets secured to a structural point of the vehicle, and a relief valve, vented outside the driver's compartment, to the atmosphere.

Bottles should be mounted to manufacturer's specification.

Bottles must be equipped with on/ off taps.

Bottle shut-offs requiring special keys are not acceptable.

Bottles used must be purpose built for use with Nitrous Oxide.

Electronic devices used for raising the temperature of Nitrous Oxide bottles must be used if produced for that purpose by an industry manufacturer, they may not be modified in any way.

Switching:

Both solenoids must operate from a common switch and the system must be capable of being switched off by three means;

1. Throttle closed switch.
2. Solenoid power arming switch.
3. Vehicle ignition switch.

Markers:

All vehicles using Nitrous Oxide must display markers located on the outside of the vehicle, in the vicinity of the supply bottle and in the top left corner of the front windscreen.

The marker shall be a yellow diamond, with N2O printed in black letters. These are available from ANDRA.

Warning Light:

A prominent blue warning light must indicate when the system is armed. This light must be visible to the driver of the vehicle when in a racing position.

4.8 ELECTRICAL

4.8.1 ECU SOFTWARE

The software loaded must be specific for the Electronic Control Unit (ECU). Functions must be easily identifiable in the field using a lap top computer to verify software and data stored. ANDRA is aware that this will be limited to the integrity of the manufacturers, and trust that this will not be an issue.

Flashing of ECUs is permitted. Manufacturer software must not be re-coded or altered in any way from manufacturer's original source coding.

4.8.2 ELECTRONIC CONTROL UNITS (ECU)

The following is specific to Group 2 (cars and motorcycles) that allow EFI in the Class Regulations.

ECU will be ANDRA approved. ECUs and dataloggers (if separate) are able to be viewed at any time by ANDRA.

Any type of traction control or slew rate ignition control (mechanical or electrical) are prohibited.

All ECUs must use a MAP sensor that is locked out and calibrated (non-adjustable).

Closed loop functions allowed, except for the use of traction control or slew rate ignition.

Relative controls allowed, except for the use of traction control or slew rate ignition.

Every function/ closed loop targets need to be pre-set prior to run and not adjustable by driver.

Any data from accelerometers, motion detectors, vehicle speed sensors and suspension travel sensors are to be used for logging only and not any functions.

Wiring of any sensor or output should be able to be verified against the ECU software or use of a multi meter.

- ◇ **NOTE: Street registered vehicles built after December 2012 will require ESC (Electronic Stability Control) fitted as mandatory under ADR (Australian Design Rules), vehicles meeting this requirement will be acceptable in ANDRA Super Street Classes no quicker than 10.000 seconds (1/4 mile or equivalent). Vehicles meeting these requirements will not be considered to have any performance advantage over vehicles that do not have ESC as standard.**

4.8.3 COMPUTER

When class rules allow use of computers and/or electronic modules, no vehicle may have any function operated remotely from outside the vehicle. Any type of traction control or slew rate ignition control (electrical or mechanical) is prohibited.

All sensors to be a fixed calibration.

Closed loop functions allowed, except for the use of traction control or slew rate ignition.

Relative controls allowed, except for the use of traction control or slew rate ignition.

Every function/ closed loop targets need to be pre-set prior to run and not adjustable by driver.

Any data from accelerometers, motion detectors, vehicle speed sensors and suspension travel sensors are to be used for logging and not any functions.

All computer systems, calibrations, data and wiring can be viewed at any time by ANDRA Officials.

- ◇ **NOTE: Except where permitted by Class Regulations, any competitor found to be employing reactive traction or slew control systems or devices by any means will be subject to a twelve (12) month suspension and a fine of \$15,000.**

Data Logging/ Recording

Data logger functions can be used as a component of EFI/ Computer systems. As long as any data from accelerometers, motion detectors, vehicle speed sensors and suspension travel sensors are to be used for logging and not any functions.

For a standalone data logging/ recording device they may be used to record the functions of a vehicle permitted under Class Regulations, providing they do not activate any function on the vehicle. The activation or use of any port, connection or function with output capability on any data logging device to control or influence any part of a vehicle during a run (e.g. activation of solenoids or servos, control of ignition timing or fuel flow etc) is prohibited. Devices may be removed, or related configuration software downloaded, at any time at the discretion of the ANDRA Officials. All computer systems, calibrations, data and wiring can be viewed at any time by ANDRA Officials.

- ◇ **NOTE: Except where permitted by Class Regulations, any competitor found to be employing reactive traction or slew control systems or devices by any means will be subject to a twelve (12) month suspension and a fine of \$15,000.**