

[^{F1}ANNEX VI

TYPE IV TEST THE DETERMINATION OF EVAPORATIVE EMISSIONS FROM VEHICLES WITH SPARK-IGNITION ENGINES

Textual Amendments

- F1** Substituted by [Council Directive of 26 June 1991 amending Directive 70/220/EEC on the approximation of the laws of the Member States relating to measures to be taken against air pollution by emissions from motor vehicles \(91/441/EEC\)](#).

Appendix 1

CALIBRATION OF EQUIPMENT FOR EVAPORATIVE EMISSION TESTING

4. CALIBRATION OF THE HYDROCARBON ANALYZER

Each of the normally used operating ranges are calibrated by the following procedure:

- 4.1. Establish the calibration curve by at least five calibration points spaced as evenly as possible over the operating range. The nominal concentration of the calibration gas with the highest concentrations to be at least 80 % of the full scale.
- 4.2. Calculate the calibration curve by the method of least squares. If the resulting polynomial degree is greater than 3, then the number of calibration points must be at least the number of the polynomial degree plus 2.
- 4.3. The calibration curve must not differ by more than 2 % from the nominal value of each calibration gas.
- 4.4. Using the coefficients of the polynomial derived from 3.2, a table of indicated reading against true concentration shall be drawn up in steps of no greater than 1 % of full scale. This is to be carried out for each analyzer range calibrated. The table shall also contain other relevant data such as:
 - date of calibration,
 - span and zero potentiometer readings (where applicable),
 - nominal scale,
 - reference data of each calibration gas used,
 - the actual and indicated value of each calibration gas used together with the percentage differences,
 - FID fuel and type,
 - FID air pressure.
- 4.5. If it can be shown to the satisfaction of the Regulatory Agency that alternative technology (e.g. computer, electronically controlled range switch) can give equivalent accuracy, then those alternatives may be used.]