

[^{F1}ANNEX VITYPE 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 \(91/441/EEC\)](#).

7. CONFORMITY OF PRODUCTION
- 7.1. For routine end-of-production-line testing, the holder of the approval may demonstrate compliance by sampling vehicles which shall meet the following requirements.
- 7.2. Test for leakage
- 7.2.1. Vents to the atmosphere from the emission control system shall be isolated.
- 7.2.2. A pressure of 370 ± 10 mm of H₂O must be applied to the fuel system.
- 7.2.3. The pressure must be allowed to stabilize prior to isolating the fuel system from the pressure source.
- 7.2.4. Following isolation of the fuel system, the pressure must not drop by more than 50 mm of H₂O in five minutes.
- 7.3. Test for venting
- 7.3.1. Vents to the atmosphere from the emission control must be isolated.
- 7.3.2. A pressure of 370 ± 10 mm of H₂O must be applied to the fuel system.
- 7.3.3. The pressure must be allowed to stabilize prior to isolating the fuel system from the pressure source.
- 7.3.4. The venting outlets from the emission control systems to the atmosphere must be reinstated to the production condition.
- 7.3.5. The pressure of the fuel system must drop to below 100 mm of H₂O in not less than 30 seconds but within two minutes.
- [^{F2}7.3.6. At the request of the manufacturer the functional capacity for venting can be demonstrated by equivalent alternative procedure. The specific procedure should be demonstrated by the manufacturer to the technical service during the type approval procedure.]

Textual Amendments

- F2** Inserted by [Commission Directive 96/44/EC of 1 July 1996 adapting to technical progress Council 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 \(Text with EEA relevance\)](#).

- 7.4. Purge test

Status: EU Directives are being published on this site to aid cross referencing from UK legislation. After IP completion day (31 December 2020 11pm) no further amendments will be applied to this version.

- 7.4.1. Equipment capable of detecting an airflow rate of 1,0 litres in one minute must be attached to the purge inlet and a pressure vessel of sufficient size to have negligible effect on the purge system must be connected via a switching valve to the purge inlet, or alternatively,
- 7.4.2. the manufacturer may use a flow meter of his own choice, if acceptable to the competent authority.
- 7.4.3. The vehicle must be operated in such a manner that any design feature of the purge system that could restrict purge operation is detected and the circumstances noted.
- 7.4.4. Whilst the engine is operating within the bounds noted in 7.4.3, the air flow must be determined by either:
 - 7.4.4.1. the device indicated in 7.4.1 being switched in. A pressure drop from atmospheric to a level indicating that a volume of 1,0 litres of air has flowed into the evaporative emission control system within one minute must be observed; or
 - 7.4.4.2. if an alternative flow measuring device is used, a reading of no less than 1,0 litre per minute must be detectable.
 - [^{F27.4.4.3}At the request of the manufacturer an alternative purge test procedure can be used, if the procedure has been presented to and has been accepted by the technical service during the type approval procedure.]
- 7.5. The competent authority which has granted type-approval may at any time verify the conformity control methods applicable to each production unit.
 - 7.5.1. The inspector must take a sufficiently large sample from the series.
 - 7.5.2. The inspector may test these vehicles by application of either 7.1.4 or 7.1.5 of Annex I.
 - 7.5.3. If in pursuance of section 7.1.5 of Annex I the vehicle's test result falls outside the agreed limits of section 5.3.4.2 of Annex I, the manufacturer may request that the approval procedure referred to in 7.1.4 of Annex I be applied.
 - 7.5.3.1. The manufacturer must not be allowed to adjust, repair or modify any of the vehicles, unless they failed to comply with the requirements of section 7.1.4 of Annex I and unless such work is documented in the manufacturer's vehicle assembly and inspection procedures.
 - 7.5.3.2. The manufacturer may request a single re-test for a vehicle whose evaporative emission characteristics are likely to have changed due to his actions under 7.5.3.1.
- 7.6. If the requirements of 7.5 are not met, the competent authority must ensure that all necessary steps are taken to re-establish conformity of production as rapidly as possible.]