

Council Directive of 21 December 1977 on the approximation of the laws of the Member States relating to the defrosting and demisting systems of glazed surfaces of motor vehicles (78/317/EEC) (repealed)

- Article 1 For the purposes of this Directive, ‘vehicle’ means any motor...
Article 2 No Member State may refuse to grant EEC type-approval or...
Article 3 No Member State may refuse or prohibit the sale, registration,...
Article 4 The Member State which has granted type-approval shall take the...
Article 5 Any amendments necessary to adapt the requirements of Annexes I,...
Article 6 (1) Member States shall bring into force the provisions necessary...
Article 7 This Directive is addressed to the Member States.
Signature

LIST OF ANNEXES

ANNEX I

SCOPE, DEFINITIONS, APPLICATION FOR EEC TYPE-APPROVAL, EEC TYPE-APPROVAL, SPECIFIC REQUIREMENTS, TEST PROCEDURE

1. SCOPE
 - 1.1. This Directive applies to the 180o forward field of vision...
 - 1.1.1. Its purpose is to ensure good visibility under certain conditions...
 - 1.2. The requirements of this Directive are so worded as to...
2. DEFINITIONS
 - 2.2. Vehicle type with regard to the windscreen defrosting and demisting...
 - 2.3. Three-dimensional reference grid
 - 2.3.1. Vehicles fitted with suspension enabling their ground clearance to be...
 - 2.4. Primary reference marks
 - 2.5. Seat-back angle
 - 2.6. Actual seat-back angle
 - 2.7. Design seat-back angle
 - 2.8. V points
 - 2.9. R point or seating reference point
 - 2.10. H point
 - 2.11. Windscreen datum points
 - 2.12. Transparent area of a windscreen
 - 2.13. Horizontal seat-adjustment range
 - 2.14. Extended seat-adjustment range
 - 2.15. Defrosting system
 - 2.16. Defrosting
 - 2.17. Defrosted area

- 2.18. Demisting system
- 2.19. Mist
- 2.20. Demisting
- 3. APPLICATION FOR EEC TYPE-APPROVAL
 - 3.1. The application for EEC type-approval of a vehicle type with...
 - 3.2. It shall be accompanied by the following documents in triplicate,...
 - 3.3. A vehicle representative of the vehicle type to be approved...
- 4. EEC TYPE-APPROVAL
 - 4.3. A certificate conforming to the model in Annex VI shall...
- 5. SPECIFIC REQUIREMENTS
 - 5.1. Windscreen defrosting
 - 5.1.1. Every vehicle shall be equipped with a system for removing...
 - 5.1.2. The efficiency of the system shall be verified by determining...
 - 5.1.3. The requirements of 5.1.1 and 5.1.2 shall be checked using...
 - 5.1.4. The following requirements must be satisfied:
 - 5.2. Windscreen demisting
 - 5.2.1. Every vehicle shall be equipped with a system for removing...
 - 5.2.2. The demisting system shall be effective enough to restore visibility...
 - 5.2.3. The following requirements must be satisfied:
- 6. TEST PROCEDURE
 - 6.1. Windscreen defrosting
 - 6.1.1. The tests shall be carried out at one of the...
 - 6.1.2. The test shall be carried out in a cold chamber...
 - 6.1.3. Before the test, the inner and outer surfaces of the...
 - 6.1.4. The vehicle, with the engine stopped, shall be kept for...
 - 6.1.4.1. If instruments are available to check that the engine coolant...
 - 6.1.5. Following the exposure period prescribed in 6.1.4, an even layer...
 - 6.1.5.1. The spray nozzle, adjusted to full fan pattern and maximum...
 - 6.1.5.1.1A spray gun having a nozzle of 1.7 mm diameter...
 - 6.1.6. After the ice has been formed on the windscreen, the...
 - 6.1.7. After the period prescribed in 6.1.6 has elapsed, one or...
 - 6.1.7.1. During the first five minutes of the test period, the...
 - 6.1.7.2. During the final 35 minutes of the test period (or...
 - 6.1.8. The observer(s) shall outline the defrosted area on the inside...
 - 6.1.9. On completion of the test, the pattern of the defrosted...
 - 6.2. Windscreen demisting
 - 6.2.1. Before the test, the inside surface of the windscreen shall...
 - 6.2.2. The test shall be carried out in an environmental chamber...
 - 6.2.2.1. The temperature in the test chamber shall be measured at...
 - 6.2.2.2. The horizontal component of the speed of the air cooling...
 - 6.2.2.3. The engine bonnet, the docks and the vents, except the...
 - 6.2.3. The mist shall be produced by means of the steam...
 - 6.2.4. The inside surface of the windscreen shall be cleaned as...
 - 6.2.5. The steam generator shall be placed with its outlets in...
 - 6.2.6. After the generator has been operating for five minutes inside...
 - 6.2.7. One minute after the observer or observers have entered the...
 - 6.2.7.1. Throughout the test the engine must run:
 - 6.2.8. At the end of the test, the demist pattern shall...

(7.)

- (8.)
- (9.)
- (10.)
- (11.)
- (12.)

ANNEX II

PROCEDURE FOR DETERMINING THE H POINT AND THE ACTUAL SEAT-BACK ANGLE AND FOR VERIFYING THE RELATIVE POSITIONS OF THE R AND H POINTS AND THE RELATIONSHIP BETWEEN THE DESIGN SEAT-BACK ANGLE AND THE ACTUAL SEAT-BACK ANGLE

Annex III to Council Directive 77/649/EEC of 27 September 1977...

ANNEX III

METHOD FOR DETERMINING THE DIMENSIONAL RELATIONSHIPS BETWEEN THE VEHICLE'S PRIMARY REFERENCE MARKS AND THE THREE-DIMENSIONAL REFERENCE GRID

1. RELATIONSHIP BETWEEN REFERENCE GRID AND VEHICLE'S PRIMARY REFERENCE MARKS
2. METHOD FOR ESTABLISHING RELATIONSHIP OF REFERENCE GRID TO REFERENCE MARKS...
3. EXAMINATION OF THE REFERENCE PLANE
4. ACTUAL TEST ATTITUDE
5. RESULTS

ANNEX IV

PROCEDURE FOR DETERMINING VISION AREAS ON WINDSCREENS OF CATEGORY VEHICLES IN RELATION TO THE V POINTS

1. POSITIONS OF THE V POINTS
 - 1.1. The positions of the V points in relation to the...
 - 1.2. Table I indicates the basic coordinates for a design seat-back...
 - 1.3. Correction for design seat-back angles other than 25°
 - 1.3.1. Table II shows the further corrections to be made to...
2. VISION AREAS
 - 2.1. Two vision areas shall be determined from the V points....
 - 2.2. Vision area A is the area on the outer surface...
 - 2.3. Vision area B is the area of the outer surface...

ANNEX V
STEAM GENERATOR

The steam generator used for the test must have the...
the water container must have a capacity of at least...

Diagram of steam generator

Dimensions and characteristics of steam generator

ANNEX VI

- (1) OJ No C 118, 16. 5. 1977, p. 33.
- (2) OJ No C 114, 11. 5. 1977, p. 9.
- (3) OJ No L 42, 23. 2. 1970, p. 1.
- (4) See page 1 of this Official Journal.