

Manufacturer : **Toyota**
Vehicle type : **XE1**
(IS200 Compressor by TMG)

TECHNICAL REPORT

according to Council Directive on the approximation of the laws of the
Member States relating to

**The braking devices
of certain categories of vehicle and of their trailers**

71/320/EEC dated : **July 26,1971**

including all amendments until

98/12/EC dated : **Jan. 27,1998**

Structure of report :

1. Test object(s) and general information
2. Test minutes
3. Remark about tested objects
4. Appendices
5. Statement of conformity

Manufacturer : **Toyota**
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1. Test object(s) and general test information

1.1. Test object(s)

1.1.1. Vehicle type : **XE**
Identification No. : **JTDBS182000009232**
Model : **Lexus IS 200 Compressor**
Sort/Categorie : **M₁**

1.2. General test information

1.2.1. Order issued by : **Toyota Motorsport GmbH (TMG)**
1.2.2. Test object(s) / test vehicle received on : **17.05.2000**
1.2.3. Test date : **17.05. - 18.05.2000**
1.2.4. Test site : **Cologne**
1.2.5. Remark : **The results of the test refer exclusively to the object(s) mentioned under point 1.1 of this report.**

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2. Test minutes

- 2.1. Test facilities : The measurement equipment used was in compliance with the test requirements.
- 2.2. Test results : **See Appendix M**

3. Remark concerning tested object(s)

All versions of the **type** as stated in the information document of the EC Type Approval Certificate No. e11*71/320*98/12*4424*00 are covered with the tested **type(s)** and test object(s) respectively.

4. Appendices

- O List of modifications : **Not applicable**
- M Measuring results : **7 sheets**

5. Statement of conformity

The vehicle type described complies with the requirements mentioned on page 1.

The technical report comprises the pages **1 to 3, and appendix M page 1 to 7** and shall not be reproduced except in full without the written approval of the testing laboratory.

Cologne, **30.07.00**
Sh/pc

Dipl.-Ing. Heinz-Werner Stiehl

Manufacturer : Toyota

Vehicle type : XE1

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Appendix M

Measuring results

- 0. Description of the vehicle
- 0.1. Make
(trade name of manufacturer): Lexus
- 0.2. Type : XE1
- 0.3. Means of identification of type,
if marked on the vehicle : Not applicable
- 0.3.1. Location of these
markings : Not applicable
- 0.4. Category of vehicle : M₁
- 0.5. Name and address of
manufacturer : Toyota Motorsport GmbH
- 0.7. In the case of components
and separate technical units,
location and method of
affixing the EC approval mark: not applicable
- 0.8. Address(es) of assembly
plant(s) : Toyota Motorsport GmbH

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1. Additional information
 - 1.1. Mass of the vehicle (stated by the manufacturer)
 - 1.1.1. Maximum mass of vehicle : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
 - 1.1.2. Minimum mass of vehicle : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
 - 1.1.3. Distribution of the mass on each axle (maximum value)
 - Axle 1 : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
 - Axle 2 : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
 - Axle 3 : Not applicable
 - Axle 4 : Not applicable
 - 1.2. Make and type of brake linings
 - Service brake front : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
 - rear : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
 - Parking brake rear : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
 - 1.2.1. Alternative brake lining : Not applicable
 - 1.2.2. Approval test method : Not applicable
 - 1.2.3. Brake circuit configuration : Front / Rear
 - 1.2.4. Declaration of which system is the secondary braking system : One circuit of the service brake
 - 1.2.5. Specification of brake valves (if applicable) : Not applicable
 - 1.2.6.1. Adjustment specifications of the load sensing valve : Not applicable
 - 1.2.6.2. Setting of pressure valves : Not applicable

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| 1.2.7. | Designed brake force distribution | : ABS fitted as standard |
| 1.2.8. | Specification of brake | |
| 1.2.8.1 | Disc brake type | |
| | Front | : See EC Approval Certificate No: e11*71/320*98/12*4424*00 |
| | Rear | : See EC Approval Certificate No: e11*71/320*98/12*4424*00 |
| 1.2.8.2 | Drum brake type | |
| | Park | : See EC Approval Certificate No: e11*71/320*98/12*4424*00 |
| 1.2.8.3. | In case of compressed air brake system | : Not applicable |
| 1.2.9. | Master cylinder type and size: | : See EC Approval Certificate No: e11*71/320*98/12*4424*00 |
| 1.2.10. | Booster type and size | : See EC Approval Certificate No: e11*71/320*98/12*4424*00 |
| 1.3. | In case of a motor vehicle | |
| 1.3.1. | Engine type | : 1G-FE with mechanical compressor |
| | Maximum vehicle speed | : 215 km/h |
| 1.3.2. | If applicable maximum mass of trailer which may be coupled | |
| 1.3.2.1. | Full trailer ⁽¹⁾ | : Not applicable |
| 1.3.2.2. | Semi-trailer ⁽¹⁾ | : Not applicable |
| 1.3.2.3. | Center axle trailer ⁽¹⁾ | : Not applicable |
| | Indicate also the maximum ratio of the coupling overhang ⁽⁴⁾ to the wheelbase | : Not applicable |
| 1.3.2.4. | Maximum mass of combination | : See EC Approval Certificate No: e11*71/320*98/12*4424*00 |

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- 1.3.2.5. O₁ trailer
braked ⁽¹⁾ : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
- unbraked ⁽¹⁾ : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
- 1.3.2.6. Vehicle is not equipped to tow a trailer with electrical braking system
- 1.3.2.7. Vehicle is not equipped to tow a trailer with anti-lock braking system
- 1.4. Tyre dimensions
- front : 225/40 ZR18
- rear : 225/40 ZR18
- 1.4.1. Temporary-use spare wheel
tyre dimension. : Not applicable
- 1.4.2. Vehicle meets the requirements
of Annex XIII : Not applicable
- 1.5. Number and arrangement of
axles : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
- 1.6. Brief description of braking
equipment : See EC Approval Certificate No:
e11*71/320*98/12*4424*00
- 1.7. Distribution of braking among the axles of a vehicle
- 1.7.1. Does the vehicle fulfil the
requirements contained in the
Appendix to Annex II : Not applicable
- 1.7.2. Information required in
point 7.3 of the Appendix to
Annex II : Not applicable

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| 1.8. | Vehicle equipped with anti-lock braking system | |
| 1.8.1 | Motor vehicles | |
| 1.8.1.1. | Does the vehicle fulfil the requirements contained in Annex X | : Yes |
| 1.8.1.2. | Category of anti-lock braking system | : Category I |
| 1.8.2. | Trailers | |
| 1.8.2.1. | Does the vehicle fulfil the requirements contained in Annex X | : Not applicable |
| 1.8.2.2. | Category of anti-lock braking system | : Not applicable |
| 1.8.2.3. | Where an Annex XIV test report has been utilised, the test report number shall be stated: | Not applicable |
| 1.9. | Trailers with electrical braking system | : Not applicable |
| 2. | Remarks | : Non |

⁽¹⁾ Delete where inapplicable⁽⁴⁾ „Coupling overhang“ is the horizontal difference between the coupling point for centre-axle trailers and centre line of the rear axle(s)

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3. Results of tests (laden)
 See EC Approval Certificate No: e11*71/320*98/12*4424*00
 except the b. m. results

	Test-speed km/h	measured performance m/s ²	measured force applied to control daN
3.1. Type-0 tests, engine disconnected Service braking secondary braking			
3.2. Type-0 tests, engine connected Service braking in accordance with AnnexII. paragraph 2.1.1.1.	180	10,2	500
3.3. Type-I tests, with repeated braking with continuous braking			
3.4. Type-II or IIA tests, as appropriate			
3.4.1. Type-III tests			
3.5. Was the secondary braking device used during the Type II/IIA test : No			
3.6. Reaction time and dimensions of flexible pipes			
3.6.1. Reaction time at the brake actuator : Not applicable			
3.6.2. Reaction time at the control line coupling head(s) : Not applicable			
3.6.3. Flexible pipes of tractors for semi-trailers	Service Control Line	Supply Line	Secondary Control Line
length (m) : Not applicable			
internal diameter (mm) : Not applicable			

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| 3.7. | Cases in which Type I and/or II (or IIa) or Type III tests do not have be carried out (Annex VII) | : Not applicable |
| 4. | Reservoirs and energy sources using compressed air | : Not applicable |
| 4.1. | Total volume of brake reservoirs | : Not applicable |
| 4.2. | Value p_2 declared by manufacturer | : Not applicable |
| 4.3. | Pressure in the reservoir after a test of eight brake applications | : Not applicable |
| 4.4. | Charging time T_1 | : Not applicable |
| 4.5. | Charging time T_2 | : Not applicable |
| 4.6. | Total volume of the reservoirs of auxiliary systems | : Not applicable |
| 4.7. | Charging time T_3 | : Not applicable |
| 5. | Automatic braking on trailers with compressed-air braking system | : Not applicable |
| 5.1. | Braking rate achieved | : Not applicable |
| 6. | Trailers with electrical braking systems | : Not applicable |
| 6.1. | Braking rate achieved | : Not applicable |