## Summary of Evidence Report - Engine Immobilisers

**Australian Design Rule 82/00**

### 1. Document
Licensee’s reference for this document
(Use only 12 characters, Note 1):

| RA0146LP82 | Vehicle Make | Land Rover |

Date (dd/mm/yyyy)

| 01/06/2001 | Vehicle Model | Range Rover |

### 2. Form Use
Please indicate how this form is being used. It is being used in support of:

- [ ] An application for a vehicle approval submitting an ECE approval (Complete section 3 only)
- [ ] An application for approval submitting test results (Complete sections 4, 5 and 6)

### 3. ECE Approval Details

| ECE Approval | E 97R | ECE Approval | E 116R |

ECE R97 Approval is for a:
- [ ] Vehicle
- [ ] Immobiliser system

### 4. Identification of Component tested
Engine immobiliser system identification code, part number or description

Range Rover Type LP Immobiliser system

### 5. Test Report Details

- **Test Report No.**
e11”74/61”95/96”0227”01

- **Test Report Date (dd/mm/yyyy)**
01/04/1998

- **Test Facility No.**
T2206

- **Test Facility Name**
Land Rover Test Centre - Gaydon

- **Test Facility Address**
Banbury Road, Lighthorne Warwickshire CV35 0RG England

### 6. Evidence Summary
Is it possible for the immobiliser to enter the set state when the ignition key is in the engine running position? [Cl.31.4]

| Yes | No |

The immobiliser is designed to prevent the operation of the vehicle under its own power by:

- [ ] disabling at least 2 vehicle circuits and/or [Cl.32.1.1]
- [ ] interference by code of at least 1 control unit

The immobiliser sets without supplementary action from the driver:

- [ ] by rotating the ignition key into the “O” position and activating a door [Cl.32.4.1]
- [ ] turning the ignition off and/or within 5 minutes of removing the key from the ignition lock and/or when locking the vehicle

The immobiliser unset by:

- [ ] a mechanical key meeting the requirements of Annex 10 [Cl.32.5.1]
- [ ] a keypad for inputting an individually selectable code having at least 10,000 variations and/or electrical/electronic device with at least 50,000 variants and/or another device (please describe in Comments section)

### Comments

Note 1: This is a mandatory field. Form saving is disabled unless mandatory fields have been completed.
Summary of Evidence Report - Engine Immobilisers

Australian Design Rule 82/00

1. Document
Licensee's reference for this document (Use only 12 characters, Note 1):
RA0161LP82
Date (dd/mm/yyyy)
01/06/2001
Vehicle Make
Land Rover
Vehicle Model
Range Rover

2. Form Use
Please indicate how this form is being used. It is being used In support of:
- An application for a vehicle approval submitting an ECE approval (Complete section 3 only)
- An application for approval submitting test results (Complete sections 4, 5 and 6)

3. ECE Approval Details
ECE Approval
E 97R
ECE Approval
E 116R
ECE R97 Approval is for a: Vehicle ☐ Immobiliser system ☐

4. Identification of Component tested
Engine immobiliser system identification code, part number or description
Range Rover Type LP Immobiliser system

5. Test Report Details
Test Report No.
e11*74/61*96/96*0227*01
Test Report Date (dd/mm/yyyy)
01/04/1998
Test Facility Name
Land Rover Test Centre - Gaydon
Test Facility Address
Banbury Road, Lighthorne Warwickshire CV35 0RG England

6. Evidence Summary

Is it possible for the immobiliser to enter the set state when the ignition key is in the engine running position?
[Cl.31.4] Yes ☐ No ☐

The immobiliser is designed to prevent the operation of the vehicle under its own power by:

- disabling at least 2 vehicle circuits ☐
- interference by code of at least 1 control unit ☐

The immobiliser sets without supplementary action from the driver:

[Cl.32.4.1] by rotating the ignition key into the "O" position and activating a door ☐

- and/or ☐

Turning the ignition off within 5 minutes of removing the key from the ignition lock ☐

- and/or ☐

When locking the vehicle ☐

The immobiliser unsets by:

[Cl.32.5.1] a mechanical key meeting the requirements of Annex 10 ☐

- and/or ☐

A keypad for inputting an individually selectable code having at least 10,000 variations ☐

- and/or ☐

Electrical/electronic device with at least 50,000 variants ☐

- and/or ☐

Another device (please describe in Comments section) ☐

Comments

Note 1: This is a mandatory field. Form saving is disabled unless mandatory fields have been completed.
Submitted to demonstrate compliance to ADR: 79/00

1. Document
Licensee's Reference for this document (use only 12 characters, Note 1):
RA0110LP79

Date (DD/MM/YYYY) 06/09/2000

ADR No. 79/00

Vehicle Make: Land Rover

Model: Range Rover

2. Form Use
Please indicate how this form is being used. It is being used in support of:

- An application for a vehicle approval, submitting test results to an ADR (Complete Sections 4 & 5).
- An application for a vehicle approval, submitting an ECE approval (Complete section 3 & 5 if applicable).
- An application for a vehicle approval, submitting evidence to an alternate standard (Complete section 5).

Other use: Please specify: ____________________________

(Add additional information in section 5 if required)

3. ECE Approval Details

ECE Approval R -

(Please enter any relevant information or additional markings pertaining to the approval in section 5)

4. Test Report Details

Test Report No. ________________________________

Test Report Date (dd/mm/yyyy) __________________

Test Facility Number ____________________________

Test Facility Name ______________________________

Test Facility Address ______________________________

Use this form is to be used for:

* Demonstrating compliance to an ADR where an SE form has not been published. Please note that the minimum data entered should reflect the data collected on the test report referenced above. Please refer to published SE forms for examples of the level of detail that VSS regards as a minimum. Quote all clauses to which the applicable tests were performed and are expected to be included on the summary of evidence. If all data being submitted is on an attachment, please enter "See Attachment" or similar into the details section.

  e.g. Clause, Temperature of test, maximum force exerted on component, time elapsed above minimum force, velocity before impact, deceleration etc.

* To provide explanations to discussion items or technical arguments to demonstrate compliance through alternative procedures. (In the case where there is not enough space to present the minimum data, please provide any further information on an attachment).
5. Details
This document is provided as a temporary SE 79/00 form.

Vehicle 1 - V8 4.0 petrol
Maximum Loaded Vehicle Mass = 2780 kg
Fuel used = 95 RON unleaded
ECE approval number = E11 R83 - 041816

Vehicle 2 - V8 4.6 petrol
Maximum Loaded Vehicle Mass = 2780 kg
Fuel used = 95 RON unleaded
ECE approval number = E11 R83 - 041815
## Summary of Evidence Report - Full Frontal Impact Occupant Protection

**Australian Design Rule 69/00**

### Document

Licensee’s reference for this document

(Use only 12 characters, Note 1):

RA0045LP69

**Vehicle Make (Optional)**

Land Rover

**Vehicle Model (Optional)**

Range Rover

**Date (dd/mm/yyyy)**

08/06/2000

### ADR Applicability

Has compliance with ADR 73/00 - Offset Frontal Impact Occupant Protection been demonstrated for this vehicle model using dual frontal airbags?

- Yes [ ]
- No [x]

If so, is it intended that the option to demonstrate compliance with the requirements of ADR 69/00 at a Conformity of Production (COP) audit be used as an alternative to submitting test evidence? [CI 12]

- Yes [ ]
- No [ ]

If so, please nominate at least one method that can be used at COP audit to demonstrate compliance with the requirements of ADR 69/00 (see Administrator’s Circular 69/00-2-3):

- [ ] Test records of a series production or production representative vehicle of the same model to the technical requirements of this national standard, or
- [ ] Test records of the same vehicle model to the technical requirements of this national standard but at a higher speed, or
- [ ] Test records of the same vehicle model to the technical requirements of FMVSS 208 Frontal Barrier Crash Test using Hybrid III dummies, or
- [ ] Test records of the same vehicle model to the technical requirements of ‘J208’ (Note 2) Frontal Barrier Crash Test using Hybrid III dummies, or
- [ ] Computer simulation(s) of the same vehicle model to the technical requirements of this national standard at the same or higher test speed. The computer model shall be validated by means including physical testing of components, sub-assemblies and complete vehicle(s), or
- [ ] Sled test records of the same vehicle model’s restraint system using the same vehicle model’s crash pulse at the same or higher test speed. The test may be conducted on a rigid test bed, complete or partial body-in-white but the test setup must be at least as rigid as the complete vehicle of the same model,
- [ ] Other method (please provide details in the comments section).

### Identification of Vehicle and Occupant Protection System Tested

**Variant / Options (s)**

- 4.6 litre HSE

**Engine Serial Number**

60D00182A

**Vehicle Identification Number (VIN) or Serial Number**

SALLPAMJ3XA397569

**Seat Belt Part Number**

- LHS EVB104370LNF / EVB104880LNF
- RHS EVB104290LNF / EVB104830LNF

**Protection system unique identification**

LPSRS

**Air Bag Part Number (if applicable)**

- LHS EHM101450LNF
- RHS EHM101420ENF

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*Note 1: This is a mandatory field. Form saving is disabled unless mandatory fields have been completed.*

*Note 2: Technical Standard for Occupant Protection in Frontal Collison (Jisha 899 1983), and TRIAS 47-1993.*

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*Sheet 1 of 2*
## Evidence Summary

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value (Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test vehicle mass</td>
<td>2482 kg</td>
</tr>
<tr>
<td>Impact velocity</td>
<td>48.75 km/h</td>
</tr>
<tr>
<td>Test Dummy used in test:</td>
<td>Hybrid III: yes, Hybrid II: no</td>
</tr>
<tr>
<td>Was there evidence of head contact?</td>
<td></td>
</tr>
<tr>
<td>HIC 36 value calculated:</td>
<td>661</td>
</tr>
<tr>
<td>Time interval (t₂ - t₁) for HIC 36 value:</td>
<td>36 ms</td>
</tr>
<tr>
<td>Thoracic resultant acceleration</td>
<td>49 g</td>
</tr>
<tr>
<td>(except cumulative intervals up to 3ms)</td>
<td>48 g</td>
</tr>
<tr>
<td>Compression deflection of sternum</td>
<td>40 mm</td>
</tr>
<tr>
<td>Axial force upper leg [LHS / RHS]</td>
<td>3.6 / 1.5 kN</td>
</tr>
<tr>
<td>Alternative results for tests with no head contact</td>
<td></td>
</tr>
<tr>
<td>Resultant acceleration (Hybrid II) (g) or neck injury measurement (Hybrid III) (N)</td>
<td>N</td>
</tr>
<tr>
<td>HIC 15 value calculated:</td>
<td></td>
</tr>
<tr>
<td>Time interval (t₂ - t₁) for HIC 15 value:</td>
<td></td>
</tr>
</tbody>
</table>

The Seatbelt Warning System complies with the requirements of: [Cl 5.5]

- Clauses 5.5.1 and 5.5.2.
- S7.3 of FMVSS 208, as per clause 5.5.4.
- ADR 4/... for seatbelt reminder systems of M1 category vehicles, as per clause 5.5.5.

### Comments

*Include any other variants that may be covered by the above test results in accordance with Circular 69/00-2-1*