

CIRCULAR 0-12-1

INTRODUCTION TO TEST FACILITY INSPECTION “A Guide for Inspectors”

**This Circular is relevant to the Third Edition of the
Australian Design Rules gazetted as
National Standards under the Motor Vehicle Standards Act 1989**

CONTENTS

	Page
1 INTRODUCTION	5
2 OBJECTIVES	5
3 TEST FACILITY INSPECTION MANUAL	5
4 TEST FACILITY EQUIPMENT MANUAL	6
5 ACCREDITATION OF TEST FACILITIES FOR ADR TESTING	6
6 INSPECTIONS WHERE ADR COMPLIANCE IS DEMONSTRATED THROUGH THE USE OF ALTERNATIVE STANDARDS	6
7 OVERSEAS AGENCY ARRANGEMENTS	6
8 TEST FACILITY IDENTIFICATION (TFId) NUMBERS	6
9 INSPECTION PROCEDURES AND INTERVALS	7
9.1 Selection of Test Facility for Inspection	7
9.2 Contact with Test Facility	7
9.3 Preparation for Inspection	7
9.4 Procedure During an Inspection of a Test Facility	7
9.5 Notification of outcome of Test Facility Inspection	7
9.6 Procedure when Witnessing Tests	7
9.7 Procedure for Audit of Original Test Report	7
10 CONFIDENTIALITY OF INFORMATION	8

1 INTRODUCTION

Under the provisions of the Motor Vehicle Standards Act 1989, test facilities conducting tests for compliance with Australian Design Rules (ADRs) are inspected to assess their “fitness to test” to the ADR requirements. Summary of Evidence Reports (SERs) summarizing test results from original test reports, are examined by the Administrator and any discrepancies resolved with the manufacturer. The manufacturer is required to retain the original test reports and test data which may be subject to audit examination.

The Administrator, in considering applications for Compliance Plate Approval, seeks assurance that:

- (i) test facilities used by the manufacturer or specialist supplier are of appropriate standard;
- (ii) tests have demonstrated compliance to the ADR; and
- (iii) adequate controls exist in the manufacturer’s plant to ensure that vehicles produced conform to the type approved.

This Circular outlines procedures specific to (i) and (ii) above. A separate Conformity of Production Manual Circular 0-13-2 covers the quality audit in (iii) above and reference should be made to the Procedures and the Australian Standards contained in the Conformity of Production Manual.

2 OBJECTIVES

Test Facilities may be owned by the Vehicle Manufacturer as part of his Product Development Facilities. Specialist Suppliers to the vehicle manufacturer also conduct ADR tests on the products in which they specialise, eg glass, seat belts etc. In this case they provide original test reports or more commonly SERs to the vehicle manufacturer for his application for Compliance Plate Approval.

Contracting Testing Facilities may also carry out ADR tests as required for both vehicle manufacturers and specialist suppliers.

Test Facilities conducting tests for the purpose of demonstrating compliance with Australian Design Rules are inspected on an audit basis to assess their “fitness to test” to the ADR requirements.

In addition during a Test Facility Inspection (TFI) original test reports from which Summary of Evidence Reports have been prepared will be selected for detailed examination.

Note:

The inspection of a Test Facility should not be construed as an approval of the Test Facility and any test procedure used, or as endorsement of the results of any tests performed.

3 TEST FACILITY INSPECTION MANUAL

To assist in the orderly inspection of Test Facilities demonstrating compliance with the ADRs a number of Circulars have been issued by the Administrator.

These Circulars are contained in the Test Facility Inspection Manual.

The manual consists of four parts as follows.

Part 1. Administrator’s Circulars.

- Circular 0-12-1 - Introduction to Test Facility Inspection. General information on Test Facility Inspection for inspecting officers and Test Facilities.

- Circular 0-12-2 - ‘General Requirements for Test Facilities.

Describes organisation, staffing and administrative arrangements that may be expected in a Test Facility; also testing practices, record and reporting systems.

- Circular 0-12-3 - General Requirements for Calibration of Test Facility Equipment and Instrumentation’

Describes equipment and instrumentation expected to be encountered in ADR testing, frequency of calibration and reference standards.

- Circular 0-12-4 - General Requirements for Engineering Records

Describes engineering records systems that may be used by a vehicle design department for consideration when examining drawings and specifications of components concerned in ADR testing and their identification.

Part 2. General Testing Procedures

- Circular 0-12-5 - General Photometric Test Procedures. Describes the general photometric test procedures for vehicle lighting requirements.

- Circular 0-12-6 - Devices for use in Defining and Measuring Motor Vehicle Seating Accommodation

Describes the typical procedures for the use of a two dimensional drafting template and a three dimensional testing machine to define and measure vehicle seating accommodation.

- Circular 0-12-7 - Motor Vehicle Driver’s Eye Range (95th Percentile Eye Ellipses).

Describes procedures for locating a set of two dimensional drafting templates to allow a uniform method of describing and measuring the driver’s direct and indirect fields of view.

Part 3. Test Procedure Circulars for Applicable ADR’s

These Test Procedures have been prepared on the basis of the test procedures described in the ADR, referenced Recommended Practices, Standards and good testing practice.

Superseded Circulars are obtainable from the Audit & Safety Investigations Section of the Federal Office of Road Safety

These circulars are intended as a guide for officers of the Australian Department of Transport and Communications or Agents acting on behalf of the Administrator when conducting audit inspections on test facilities to assess their ‘fitness to test’ and when witnessing tests. While conformance with these procedures is sufficient to demonstrate compliance with the ADR, other equipment and procedures may be used provided the same results as those described are achieved. Such Test Procedures may also be useful to vehicle manufacturers and testing organisations conducting ADR testing.

Nothing in these Test Procedures however absolves the

manufacturer from complying with the requirements as specified in the ADR which always remains the primary requirement.

The Test Procedures are indexed as Circulars and are structured in a standard format to facilitate familiarization.

4 TEST FACILITY EQUIPMENT MANUAL

Test Facilities conducting tests demonstrating compliance with the ADRs should maintain a Test Facility Equipment Manual (TFEM) describing the testing organization, equipment and instrumentation used, calibration data, standards and quality assurance procedures etc. used in the test facility as part of their normal test facility management arrangements. Such reports should be kept up to date where changes occur and may be used as the basis for the audit inspection of the Test Facilities. Circulars 0-12-2 and 0-12-3 may provide assistance in preparing such reports.

The examination of the Test Facility Equipment Manual or the inspection of a test facility is not a prerequisite for acceptance of Summary of Evidence Reports.

5 ACCREDITATION OF TEST FACILITIES FOR ADR TESTING

In Australia, National Association of Testing Authorities (NATA) registration of Test Facilities conducting ADR tests for a particular ADR will be accepted by the Administrator as an indication of an acceptable standard of 'fitness to test'. Where such registrations are held regular inspections by the Administrator will not normally be conducted. However under the terms of the conditions of issue of a Compliance Plate Approval the Administrator reserves the right to conduct additional inspections if required. Notwithstanding NATA registration, opportunity will be taken to witness ADR conformity testing where possible.

Where a Test Facility holds NATA registration for a particular ADR a Test Facility Equipment Manual on the ADR concerned will not normally be called for.

6 INSPECTIONS WHERE ADR COMPLIANCE IS DEMONSTRATED THROUGH THE USE OF ALTERNATIVE STANDARDS

A number of Third Edition ADRs permit demonstration of compliance through the use of "E" Mark approvals issued under the United Nations Economic Commission for Europe or by use of other Alternative Standards referred to in the ADRs. Test facilities seeking ADR compliance by conducting tests to the requirements of ADR equivalent ECE Regulations through the use of "E" Mark approvals will not normally be subject to TFI. Test

facilities testing to ECE Regulations without obtaining "E" Mark approval or to other Alternative Standards will be subject to TFI.

7 OVERSEAS AGENCY ARRANGEMENTS

Agency agreements have been reached with Regulatory Authorities or National Testing Agencies in major countries exporting vehicles to Australia, to inspect Test Facilities and witness tests where facilities conduct tests to demonstrate compliance with the ADRs.

The Australian Department of Transport and Communications will, on behalf of the Administrator determine the inspection program for the Agency and the Test Facilities overseas following the above principles and with a brief which will include:

- arrangements with vehicle manufacturer, parts supplier or contract testing facility
- Test Facility to be inspected
- proposed date of inspection
- the applicable Australian Design Rules
- any specific items to be checked in the Test Facility
- report on the Test Facility 'fitness to test'.

Agency inspections of ADR Testing Facilities will only be carried out on specific instructions from the Australian Department of Transport and Communications. They may be conducted at the same time as the Agency carries out inspections servicing their own type inspection/approval arrangements; in these situations the Australian inspection component may be limited to the unique ADR requirements.

TFIs may be carried out during a visit for a Conformity of Production assessment with prior agreement or instruction from the Administrator.

8 TEST FACILITY IDENTIFICATION (TFId) NUMBERS

Each test facility is uniquely identified by a number and prefixed with either M, S or T, signifying:

M = Manufacturer

S = Specialist Supplier

T = Contracting Testing Organisation

The Test Facility Identification (TFId) number is an essential part of the certification system and is required to be quoted on all Summary of Evidence Reports (SER) for entry into the Compliance Plate Approval (CPA) database system. Omission of this number in the SER will delay processing of the CPA application.

If the organisation submitting the SER is aware that the test facility is being used to provide evidence for the first time or if it is not aware of the TFId the word "NEW" shall be inserted in the relevant place in the SER.

9 INSPECTION PROCEDURES AND INTERVALS

Inspection of Test Facilities will be conducted, under normal circumstances, at intervals of 18 to 24 months except as described in Sections 5 and 6 above.

9.1 Selection of a Test Facility for Inspection

Selection of Test Facilities for inspection will be based upon factors including:

- the previous inspection history of the Facility
- the complexity and relative importance of the ADR

These factors will be weighted and will be programmed to produce an inspection schedule.

9.2 Contact with Test Facility

The Test Facility will normally be advised some six weeks before the proposed inspection together with the ADRs concerned. Where a contract testing facility or specialist supplier is to be inspected, the Administrator, his officers or agents will normally co-ordinate an inspection schedule with the test facility.

Advice will be sought on the future ADR testing program so that as far as possible the inspection and witnessing of tests may coincide. If no ADR tests are scheduled for a reasonable period the inspection may proceed without witnessing tests.

In the case of Overseas Agents, the first contact with the test facility will be made by the agent.

An appointment will be arranged with the Test Facility for the inspection, advising the broad area of interest, the Administrator's officers concerned and the expected duration.

The Test Facility Equipment Manual for the subject ADRs may be used as the basis for conducting the inspection.

9.3 Preparation for Inspection

The Test Facility Equipment Manual and previous inspection reports concerning the Test Facility will be examined in preparation for the inspection. Items of interest or concern will be noted together with any other areas noted for audit inspection.

Such notes will then be used by the Inspectors as the basis for inspection of the test facility.

The audit of original test reports from the test facility from which Summary of Evidence Reports have been made and submitted in support of an application for Compliance Plate Approval will normally be made during the inspection. The SERs for audit will be selected, noting the references to identify the original test report.

9.4 Procedure during an Inspection of a Test Facility

On arrival at the Test Facility the inspectors will meet with the management to review the range of testing conducted, the test facility organisation and any arrangements necessary for the smooth conduct of the inspection.

The Test Facility Equipment Manual and other relevant documentation are to be reviewed.

Previous inspection reports and any unresolved or unclear matters from reports or previous visits are to be reviewed.

The Test Facility's instrumentation, calibration procedures, records, reference standards and quality assurance methods are to be inspected with particular emphasis on reporting methods, original data acquisition,

verification and checking of test results including computer programs where used and accuracy of reports issued.

Where discrepancies are found during the inspection they are to be discussed and agreed between the inspectors and the facility at the time. Dialogue between the parties may be useful at this time to resolve any perceived problems.

A final meeting with the Test Facility management is to be held to advise where there may be areas of concern and of any corrective action that may be required.

After the inspection, the conclusions from the Final Meeting are to be confirmed with the Test Facility and comments requested on possible corrective action.

9.5 Notification of Outcome of Test Facility Inspection

The Test Facility inspected will normally be advised in writing by the Administrator within 4 weeks of the outcome of the inspection.

9.6 Procedure when Witnessing Tests

The witnessing of tests demonstrating compliance with an ADR will include.

- Preparation of component/system for test.
- Preparation of Test equipment and instrumentation including
 - : test equipment set up
 - : calibrations
 - : methods of recording data.
- Conduct of test
- Analysis of results
- Reporting procedure

NOTE:

1. Witnessing of a test and any report made by the inspectors will not replace the test report to be prepared by the Test Facility.
2. During the testing program, when calibration curves are made or other data recorded, the inspector may verify the record by signing and dating if he is satisfied with the results.
3. Inspector's report on the ADR test may be entered into the Administrator's Records for the vehicle models concerned with the particular ADR.

9.7 Procedure for Audit of an Original Test Report

A copy of original test report from which a Summary of Evidence Report (SER) has been prepared will be selected for detailed examination during a Test Facility Audit inspection visit.

9.7.1 Examination of the original test report at the Test Facility is to validate its identity and completeness and that all the cross references to the SER are correct.

9.7.2 Any deficiencies in the original test report noted by the inspectors shall be reported to the Administrator. Discrepancies are to be resolved with the Test Facility/Vehicle manufacturer in the normal way used for examination of ADR submissions.

9.7.3 Result of the examination may be entered on the Administrator's Records of the Vehicle Models and the current status for that particular ADR.

10 CONFIDENTIALITY OF INFORMATION

Any data supplied by a test facility to the inspectors will be held "Commercial in Confidence" between the parties.

Where a Specialist Supplier or Contracting Testing Organization is concerned, data will be held "In Confidence" between these parties, the vehicle manufacturer concerned and the Administrator.