

CIRCULAR 30-1-1
CERTIFICATION PROCEDURES FOR
AUSTRALIAN DESIGN RULE NO. 30 -DIESEL ENGINE EXHAUST SMOKE
EMISSIONS

APPROVAL OF ENGINE AS A COMPONENT

1. The Australian Motor Vehicle Certification Board has agreed to approve diesel engines for the purposes of ADR 30, when this is desired by an engine manufacturer. Such approvals will be in the form of Compliance Mark Approvals. Application procedures for Compliance Mark Approval are described below.
2. In order to demonstrate compliance with ADR 30, it will be necessary for the engine manufacturer to either:
 - a. carry out testing in accordance with Clauses 30.3 and 30.4 of the Rule and to submit the necessary data to the Board, or
 - b. provide the necessary evidence that the engine complies with one of the standards specified in Clauses 30.2.2.2. (i) and 30.2.2.2.(ii) of the Rule.
 - c. provide the necessary evidence that a vehicle fitted with the engine complies with Clause 30.2.2.2.(iii)(ECE Regulation 24) together with acceptable evidence of the inlet and exhaust parameters at which the engine was tested.
3. When the Board is satisfied that the appropriate requirements have been complied with, the engine Manufacturer will be authorised to affix an approved Compliance Mark to all engines for which approval has been granted.
4. The Compliance Mark will be the label which is required to be affixed to the engine in accordance with Clause 30.2.3 of the Rule. The label format for engines approved in accordance with (a) above is shown at Attachment 1, and the label format for engines approved in accordance with (b) or (c) above is shown at Attachment 2. Alternative formats which some manufacturers find compatible with their installation requirements are also shown at Attachments 1 and 2.
5. The preferred sizes the labels are 100 mm by 40 mm and 170 mm by 30 mm respectively. Minor variations in size are permissible provided that legibility and format are essentially preserved. The Board may allow the inclusion of additional information where this is necessary for adequate identification of the engine. Notwithstanding these permitted variations, Board approval of the label is required in every instance.

APPROVAL OF VEHICLE AS A WHOLE

6. A vehicle manufacturer can obtain ADR 30 approval for a vehicle as a whole. A vehicle manufacturer wishing to obtain compliance plate approval for a vehicle incorporating a diesel engine should submit a summary of evidence form SE30 including one of the types of evidence described below (and referencing it on the vehicles Form CA as described in Circular 0.3.4). Compliance may be established by:
 - a. testing in accordance with the procedures specified in Clause 30.3 and 30.4 of the Rule; or

- b. providing, inter alia, the necessary evidence that the engine complies with any of the Standards specified in Clause 30.2.2.2 of the Rule; or
 - c. providing, inter alia, the necessary evidence that the engine is one for which ADR 30 Compliance Mark Approval has been given, in accordance with the preceding section of this circular.
7. In cases where option (b) or (c) is selected, it will be necessary for the vehicle manufacturer to demonstrate to the Board that:
- a. the inlet and exhaust parameter restrictions specified in the evidence submitted to the Board in the case of the U.S. E.P.A. and B.S. Standards specified in Clause 30.2.2.2. and shown on the engine label in the case of option (c) are not exceeded for the engine as installed in the vehicle, and
 - b. no modifications have been incorporated which would affect compliance with the relevant standard in the case of option 6 (b) or the validity of the original Compliance Mark Approval of the engine in the case of option 6 (c).
8. In the case of a vehicle as a whole which complies with ECE Regulation 24, it will not be necessary to measure inlet and exhaust parameter restrictions as the presence of a validly affixed 'E' mark on the vehicle signifies that these parameters are acceptable to the Approving Authority. However, it will be necessary to provide the Board with an assurance that the vehicle has not been modified in such a manner to affect the validity of the original approval.
9. In cases where option 6 (a) or 6 (b) is selected, the ADR 30 engine label affixed in accordance with the requirements of Clause 30.2.3 of the Rule shall indicate that the engine was manufactured to comply with ADR 30. The month and year of the engine's manufacture shall also be shown in uncoded form e.g. 7/84. No size or format is prescribed, but each label is subject to acceptance by the Board. It should be noted that the statement on the label pertaining to compliance with ADR 30 should be without abbreviations, except for the commonly used abbreviation 'ADR'.

APPLICATION PROCEDURES FOR COMPLIANCE MARK APPROVAL

10. Engine manufacturers will be required to make a separate application to the Board in respect of each particular model of engine for which approval is sought. A typical example of a Compliance Mark Approval is shown at Attachment 3. An engine manufacturer wishing to obtain a Compliance Mark Approval for a diesel engine should apply using Form CM30 - Original/Amending Application for Compliance Mark Approval - Diesel Engine, and attach the information on the engine test required by Form SE30 - Summary of Evidence Report - ADR30, (Parts 1, 2, 3 and 4 or 6). Form CM30 is at Attachment 4 and Form SE30 is at Attachment 5.
11. Should it be necessary to provide supplementary information, this documentation should be forwarded at the earliest opportunity and be accompanied by Form AM 30 - Additional Documentation for Compliance Mark Approval - Diesel Engine (Supplementary submission). A copy of this form is at Attachment 6. Use of this form will ensure identification of the accompanying documentation with the original application to which it related.
12. Details of engine make/model requirements are given in Circular 30-1-2.

This Circular supersedes Circular No.59 in the first series of Board

ADR 30 LABEL FOR APPROVAL OF AN ENGINE AS A COMPONENT
WHEN APPROVAL IS GRANTED ON THE BASIS OF TESTING
CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF
CLAUSES 30.3 AND 30.4

ENGINE MANUFACTURER'S NAME	THIS ENGINE WAS MANUFACTURED TO COMPLY WITH ADR 30 BY ALPHA MOTORS PTY LTD DELTA 310 7/84* AB12345* MAX INLET DEPRESSION 2.85 kPa at 2800 RPM MAX EXH BACK PRESS 9.75 kPa at 2800 RPM COMPLIANCE MARK APPROVAL NO. 6000/XXXXX AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD	ENGINE MAKE** AND MODEL
MONTH AND YEAR OF ENGINE MANUFACTURE		COMPONENT IDENTIFICATION NUMBER

ALTERNATIVE FORMAT

THIS ENGINE WAS MANUFACTURED TO COMPLY WITH ADR 30
 BY ALPHA MOTORS PTY LTD
 DELTA 310 7/84* AB12345*
 MAX INLET DEPRESSION 2.85 kPa at 2800 RPM COMPLIANCE MARK
 MAX EXH BACK PRESS 9.75 kPa at 2800 RPM APPROVAL NO.6000/XXXXX
 AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD

- * Variable information
- ** The normal sales descriptions for Engine Make and Model should be used, and abbreviations should not be used.

Material : Metal
 Colour: Other than red, green or blue
 Fixing: Rivetting or welding (unless otherwise approved by the Board)

Minimum Letter Size: 2.3 mm (embossed or impressed embossed, unless otherwise approved by the Board)

ADR 30 LABEL FOR APPROVAL OF AN ENGINE AS A COMPONENT
WHEN APPROVAL IS GRANTED ON THE BASIS OF COMPLIANCE
WITH EITHER CLAUSE 30.2.2(i), 30.2.2(ii) OR
30.2.2(iii)

ENGINE MANUFACTURERS NAME	THIS ENGINE WAS MANUFACTURED TO COMPLY WITH ADR 30 CLAUSE 30.2.2.2(i) BY ALPHA MOTORS PTY LTD SIGMA 109 7/84* CD6789* MAX INLET DEPRESSION 2.85 kPa at 2800 RPM MAX EXH BACK PRESS 9.75 kPa at 2800 RPM COMPLIANCE MARK APPROVAL NO. 6000/XXXXX AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD	CLAUSE 30.2.2.2(i) FOR USE EPA APPROVED ENGINES, CLAUSE 30.2.2.2(ii) FOR BS AU141a: 1971 APPROVED ENGINES, CLAUSE 30.2.2.2 (iii) FOR ECE R24 APPROVED VEHICLES ENGINE MAKE** AND MODEL
MONTH AND YEAR OF ENGINE MANUFACTURE		COMPONENT IDENTIFICATION NUMBER

ALTERNATIVE FORMAT

THIS ENGINE WAS MANUFACTURED TO COMPLY WITH ADR 30 CLAUSE 30.2.2.2 (i)
 BY ALPHA MOTORA PTY LTD
 SIGMA 109 7/84* CD6789*
 MAX INLET DEPRESSION 2.85 kPa at 2800 RPM COMPLIANCE MARK
 MAX EXH BACK PRESS 9.75 kPa at 2800 RPM APPROVAL NO.6000/XXXXX
 AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD

- * Variable information
- ** The normal sales descriptions for Engine Make and Model should be used, and abbreviations should not be used.

Material : Metal
 Colour: Other than red, green or blue
 Fixing: Rivetting or welding (unless otherwise approved by the Board)

Minimum Letter Size: 2.3 mm (embossed or impressed embossed, unless otherwise approved by the Board)

AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD

Comprising Commonwealth, State and Territory Authorities

SECRETARIAT
AMVCB
P.O. BOX 1553
CANNBERRA CITY
ACT 2601**COMPLIANCE MARK APPROVAL**

The Australian Motor Vehicle Certification Board (hereinafter called the Board) hereby approves the affixing by the Company named and described in Schedule 2 hereto (hereinafter called the Company) to a Component of the kind described in Schedule 3 hereto (hereinafter called a specified component) of a Compliance Mark that conforms to the specimen set out in Schedule 5 hereto (hereinafter called the approved Compliance Mark).

In this Approval, a reference to an Australian Design Rule is a reference to a Rule endorsed by the Australian Transport Advisory Council as set out in 'Australian Design Rules for Motor Vehicle Safety' (Second Edition) issued by the Commonwealth Department of Transport.

This Approval may at the absolute discretion of the Board be cancelled or suspended at any time.

This Approval is issued subject to the following conditions:

1. The Company shall not affix the approved Compliance Mark to a component that is not a specified component.
2. The Company shall not affix to a specified component a plate purporting to be a Compliance Mark that is not the approved Compliance Mark.
3. The Company shall not without the prior approval of the Board affix the approved Compliance Mark to a component that is in any way different from the component described in the final form of the application for this Approval. The application includes reports and other documents relating to the application.
4. This Approval remains valid only whilst the requirements of other approvals or standards which are mentioned in Schedule 6 hereto continue to be met.
5. The Company shall by detailed quality control and test ensure continuing compliance with Australian Design Rules mentioned in Schedule 1 hereto.
6. The Company shall maintain records of detailed quality control and test documentation.
7. The Company shall permit the Board or its agent to have reasonable access to its plant for inspection of manufacture, assembly and test, and for examination of records.
8. The Company shall carry out, to the satisfaction of the Board, any tests required by the Board, for the purposes of demonstrating compliance with the Australian Design Rules as set out in Schedule 1 hereto.
9. The Company shall not affix the approved Compliance Mark to a component manufactured, on or after the expiry date specified in Schedule 4.
10. The approved Compliance Mark shall be affixed to the component to which it relates in the position specified as Mark Location in Schedule 4.
11. The Component Identification Number shall be located in the position specified as C.I.N. Location in Schedule 4.
12. On cessation of production of the engine model to which this approval applies, the company must notify the Board of the date of manufacture and CIN of the last engine manufacture

SCHEDULE 1**Australian Design Rules**

No. 30. Diesel Engines Exhaust Smoke Emissions (February 1984).

SPECIMEN

AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD
 Comprising Commonwealth, State and Territory Authorities

**ORIGINAL/AMENDING*
 APPLICATION FOR COMPLIANCE
 MARK APPROVAL DIESEL ENGINE**

(REFER BOARD CIRCULAR 30-1-1 BEFORE COMPLETING THIS FORM)

The Chairman,
 Australian Motor Vehicle Certification Board

This application is made for Approval to affix the Compliance Mark of the form illustrated below to diesel engines of the make and model designation

BOARD USE ONLY		CM 30
Date Received		
Engine Code		
Application Occurrence		
Engine Class		
Manufacturer's Code		
Application Type		

Manufacturer's reference
 for this document

MAKE

MODEL

ENGINE DETAILS:

Number of cylinders:

Total swept volume:

Arrangement of cylinders:

Type of cycle: 2 stroke stroke

Method of aspiration: Natural Supercharged Turbocharged Intercooled

Commencing component identification number(s) (CIN):

Location of component identification number:

COMPLIANCE MARK (Insert facsimile of Compliance Mark identifying variable information.)

† Variable information

* Delete whichever is not applicable

DETAILS OF COMPLIANCE MARK

Colour:	Material:
Method of lettering:	Method of attachment:
Location on engine:	
.....	

BASIS OF APPROVAL:

Testing according to the method prescribed by ADR 30 Clauses 30.3 and 30.4, or	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Approval issued by the Environmental Protection Agency (U.S.A.), or	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Type test certificate in accordance with BS AU 141a:1971, or	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO
Type test certificate in accordance with ECE Regulation No. 29 for which the max. inlet depression was R.P.M. and the max. exhaust pressure was R.P.M.	<input type="checkbox"/>	YES	<input type="checkbox"/>	NO

SUPPORTING DOCUMENTATION

<p>Original application *</p> <p>Annex A is attached</p>	<p>Amending application *</p> <p>Annex A is attached, or *</p> <p>No supporting evidence is required *</p>
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I certify that all the information provided in respect of this application is correct, that the engines comply with Australian Design Rule No. 30 — Diesel Engine Exhaust Smoke Emissions, and agree to abide by all the Board's terms and conditions of Approval issue.

Signed: Date:

Name: Title:

Company:

Address: Phone:

Signed for and on behalf of:
(manufacturer's name for Approval documents)

Address:
(Manufacturer's address for Approval documents)

* Delete whichever is not applicable

AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD
 Comprising Commonwealth, State and Territory Authorities

SUMMARY OF EVIDENCE REPORT

Australian Design Rule 30: **Diesel Engine Exhaust
 Smoke Emissions**

BOARD USE ONLY		SE 30
Date Received		
Evidence no.		
E.O.	Date Examined	Status

Manufacturer's reference
 for this document

1. Manufacturer's Name

2. Document/Test facility references

The documents detailed contain ALL the information required to demonstrate full compliance of the test vehicle/component with the Design Rule.

Document:	Reference No:	Date:
	Title:	
	Located at:	
Test Facility:	Name	
	Address	
	Ident No.	NOTE: If more than one document use Extension Sheet A

NOTES ON COMPLETING FORM SE 30

- For an application for Compliance Mark Approval (CMA) of a diesel engine to ADR 30, Section 3 responses 1 to 3 are required.
 In addition, if the application for CMA is based on,
 - an engine test to ADR 30, then section 6 responses are required
 or
 - an approval to a standard specified in ADR 30 Clauses 30.2.2.2(i), (ii) or (iii) then section 4 responses are required.
- For an application for Compliance Plate Approval (CPA) of a vehicle, all section 3 responses are required.
 In addition, if the application for CPA is based on,
 - an ADR 30 test on a vehicle, then section 6 responses 1 to 14 are required,
 or
 - an approval to the standard specified in ADR 30 Clause 30.2.2.2(iii), then the response to section 5 is required,
 or
 - an approval to a standard specified in ADR 30 Clauses 30.2.2.2(i) or (ii) or a previously obtained CMA, then section 4 and section 7 responses are required.

3. Identification of Components tested

Engine make	(1)	Engine Model	(2)
Engine CIN			(3)
Vehicle make	(4)	Vehicle Model	(5)
Vehicle identification No.			(6)

SUMMARY OF EVIDENCE REPORT

SE 30

(continued)

4. For Engine with U.S.E.P.A., B.S.I., ECE OR Compliance Mark Approval

Approving authority (US EPA/BSI/ECE/AMVCB)				(1)	
Approval No.		(2)	Model year (if applicable)		(3)
Maximum inlet depression at full load rated speed		(4)	kPa at	(5)	r/min
Maximum exhaust back pressure at full load rated speed		(6)	kPa at	(7)	r/min

5. For Vehicle with E.C.E. approval

ECE Reg. 24 — Approval mark	E 24R	(1)
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6. Evidence Summary

		RESPONSE			UNITS	
Maximum power rating of engine CI 30.4.1.1		(1)			kw	
		(2)			at r/min	
Test No.		2	3	4	—	
Engine speed	CI 30.4.1.1	(3)	(4)	(5)	(6)	r/min
Calculated nominal gas flow	CI 30.4.1.1	(7)	(8)	(9)	(10)	l/s
Measured light absorption coefficient	CI 30.4.1.1	(11)	(12)	(13)	(14)	m ⁻¹
Engine parameters at full load rated speed	Max inlet depression	(15)			kPa	
		(16)			at r/min	
	Max. exhaust back pressure	(17)			kPa	
		(18)			at r/min	

7. Vehicle Installation Details (measured with engine installed in vehicle for which approval is sought)

Maximum inlet depression at full load rated speed	(1)	kPa at	(2)	r/min
Maximum exhaust back pressure at full load rated speed	(3)	kPa at	(4)	r/min

AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD
 Comprising Commonwealth, State and Territory Authorities

ADDITIONAL DOCUMENTATION FOR COMPLIANCE MARK APPROVAL DIESEL ENGINES

THIS SUBMISSION MAY BE APPLICABLE TO MORE THAN ONE ENGINE MODEL ONLY IF ALL THE INFORMATION SUPPLIED HEREIN IS ALSO APPLICABLE TO EACH ENGINE MODEL IDENTIFIED.

BOARD USE ONLY		AM 30
Date Received		
EO	Date Examined	

Manufacturer's reference for this document

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If providing further information requested by Board's officers, state Board's reference number.

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1 MAKE (compliance mark designation)

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2. MODELS (compliance mark designation) — use additional sheets if space insufficient

Model	Commencing Engine Identification No. (CIN)	Manufacturer's reference on original or amending application for CMA
	Engine CIN	
	Engine CIN	
	Engine CIN	
	Engine CIN	

BOARD USE ONLY	
Engine code/ occurrence No.	Status

SPECIMEN

3. Summary of Documents — use additional sheets if space insufficient.

If documentation is to be submitted later, enter the notation 'TO FOLLOW' in the column headed "Manufacturer's reference on evidence document."

Manufacturer's reference on evidence document	If evidence document not attached, state the manufacturer's reference on the Application for Compliance Mark Approval for which it was initially provided.	Comments (if any)

I certify that this submission and its attachments are correct and that the engines comply with Australian Design Rule No. 30 — Diesel Engine Exhaust Smoke Emissions.

Signed Date (DAY)

Name Title

For and on behalf of

