

JIS

JAPANESE INDUSTRIAL STANDARD

Automotive engines—Pistons

JIS D 3104—1996

Translated and Published

by

Japanese Standards Association

**In the event of any doubt arising,
the original Standard in Japanese is to be final authority**

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Automotive engines – Pistons

D 3104-1996

1. Scope This Japanese Industrial Standard specifies pistons made of aluminium alloy used for automobile engines (hereafter referred to as "pistons").

Remarks: The following standards are cited in this Standard:

JIS B 0109	Glossary of terms relating to reciprocating internal-combustion engines (main parts)
JIS B 0403	Casting – System of dimensional tolerances and machining allowances
JIS B 2804	Retaining rings-C type
JIS B 7184	Measuring projectors
JIS B 7420	Limit gauges
JIS B 7506	Gauge blocks
JIS B 8032	General rules for piston rings
JIS G 3131	Hot-rolled mild steel plates, sheets and strip
JIS G 3141	Cold-reduced carbon steel sheets and strip
JIS G 5510	Austenitic iron castings
JIS H 4140	Aluminium and aluminium alloy forgings
JIS H 5202	Aluminium alloy castings
JIS Z 2245	Method of Rockwell and Rockwell superficial hardness test

2. Definitions For the purpose of this Standard, the following definitions, in addition to those specified in JIS B 0109, apply:

- (1) pin direction The axis direction of piston pin hole.
- (2) thrust direction The direction perpendicular to the pin direction.
- (3) valve recess The recess made on the piston-top surface for preventing interference with suction valve and exhaust valve.
- (4) pin hole offset The quantity of deflection of pin hole axis line from piston axis line.
- (5) side wall The member connecting pin boss with skirt
- (6) side relief groove The groove made on inner surface of pin hole in the pin direction.
- (7) rotation stop pin The pin provided in ring groove for stopping rotation of piston ring.
- (8) lip The aperture edge of combustion chamber of piston.