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**Automobile parts — Wheels — Fastening
methods and dimensions**

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Society of Automotive Engineers of Japan, Inc. (JSAE) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS D 4220 : 1984** has been replaced with this Standard.

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Automobile parts — Wheels — Fastening methods and dimensions

Introduction

This Japanese Industrial Standard was established in 1954 and has gone through three-time revisions to this day, the most recent of which has taken place in 1984. To correspond to the development of market trend afterwards, the revision this time has been conducted.

ISO 4107, which covers some types of automobiles (trucks and buses) to which this Standard is applicable, has been published. However, this ISO Standard is not treated as the corresponding International Standard of this Standard at the last time revision of JIS, because ISO 4107 specifies only one fastening method. According to this, JIS at the last time revision has added this one method of ISO Standard to eight fastening methods of JIS. Since the situation remains the same at the revision of this time, the method of ISO Standard has been added in the same way as that of last time, but the modifications based on the third edition of ISO 4107 published in 1998 has been reviewed.

1 Scope

This Standard specifies the fastening methods, and shapes and dimensions of wheels for automobiles. However, this Standard is not applicable to wheels for two-wheeled vehicles, industrial vehicles, construction vehicles and agricultural machines.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS D 4102 *Wheels and rims for pneumatic tyres — Vocabulary, designation and marking*

ISO 4107 *Commercial vehicles — Wheel hub attachment dimensions*

3 Terms and definitions

For the purposes of this Standard, the terms and definitions given in JIS D 4102 shall apply.

4 Types of fastening methods

The types of fastening methods shall be as given in table 1.

Table 1 Types of fastening methods

Shape of nut seat of fastening part		Type symbol	Application	Table	Remarks
Taper seat	Disc single side	T ₁ S	Exclusively for single wheel	Table 2	Mainly used for light automobiles, passenger cars and small type trucks.
		T ₁ D	Exclusively for dual wheels	Table 3	
	Disc both sides	T ₂	Common use for single and dual wheels	Table 4	Mainly used for trucks and buses.
Spherical seat	Disc single side	S ₁ S	Exclusively for single wheel	Table 5	Mainly used for light automobiles, passenger cars and small type trucks.
	Disc both sides	S ₂	Common use for single and dual wheels	Table 6	Mainly used for trucks and buses.
Flat spot facing	Disc single side	F ₁ L	Exclusively for single wheel	Table 7	Mainly used for passenger cars and small type trucks. Exclusively for light alloy wheel.
Flat seat	—	F	Common use for single and dual wheels	Table 8	Mainly used for trucks and buses.
	—	FI	Common use for single and dual wheels	Table 9	Mainly used for trucks and buses (Those specified in ISO 4107).

5 Shapes and dimensions

The shapes and dimensions for each fastening method shall be as given in table 2 to table 9.