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**Bicycles—Spokes and nipples**

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## Foreword

This Japanese Industrial Standard has been 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 Japan Bicycle Promotion Institute (JBPI)/Japanese Standards Association (JSA) 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 9420**:2010 is replaced with this Standard.

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# Bicycles—Spokes and nipples

## Introduction

This Japanese Industrial Standard was established in 1961 and has been revised six times since then, the last time being in 2010. The intent of this revision is to update the requirements by reflecting the recent usage of the products in Japan.

No corresponding International Standard has been established at this point.

## 1 Scope

This Standard specifies requirements for the spokes and nipples to be used mainly for bicycles for general use, bicycles for young children, and electric power assisted cycles specified in **JIS D 9111**.

## 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 B 0101 *Screw threads and fasteners—Vocabulary*

JIS D 9111 *Cycles—Classification, terminology and essential characteristics*

JIS G 4401 *Carbon tool steels*

JIS H 8610 *Electroplated coatings of zinc on iron or steel*

## 3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS B 0101** apply.

## 4 Types

Types of spokes and nipples covered by this Standard are straight spokes, butted spokes and nipples.

Nipples are classified into **JIS**-specified nipples and **ISO**-specified nipples.

## 5 Strength

### 5.1 Tensile strength

When tested in accordance with **10.1**, the tensile strength of spokes and nipples shall not be less than the values specified in Table 1.