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STANDARDS  
Australia



# Earth-moving machinery — Service tools

Part 1: Common maintenance and adjustment tools

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AS ISO 4510.1:2021

This Australian Standard® was prepared by ME-063, Earthmoving Equipment. It was approved on behalf of the Council of Standards Australia on 11 December 2020.

This Standard was published on 22 January 2021.

The following are represented on Committee ME-063:

Australian Industry Group  
Better Regulation Division — SafeWork NSW  
Construction and Mining Equipment Industry Group  
Department of Natural Resources, Mines and Energy, Qld  
Department of Regional NSW  
Engineers Australia / Mining Electrical and Mining Mechanical Engineering Society  
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This Standard was issued in draft form for comment as DR AS ISO 4510.1:2020.

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ISBN 978 1 76113 140 0

# Earth-moving machinery — Service tools

## Part 1: Common maintenance and adjustment tools

First published as AS ISO 4510.1:2021.

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## Preface

This Standard was prepared by the Standards Australia Committee ME-063, Earthmoving Equipment.

The objective of this document is to provide the tool groupings commonly used for carrying out on-site, normal maintenance and routine adjustment work on earth-moving machinery as defined in ISO 6165.

This document is identical with, and has been reproduced from, ISO 4510-1:1987, *Earth-moving machinery — Service tools — Part 1: Common maintenance and adjustment tools*.

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- (b) A full point substitutes for a comma when referring to a decimal marker.

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 4510-1 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*.

This second edition cancels and replaces the first edition (ISO 4510-1:1986), of which it constitutes a minor revision, incorporating changes to [table 1](#) (tools Nos. 1, 3 and 10).

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

# Australian Standard®

## Earth-moving machinery — Service tools

### Part 1: Common maintenance and adjustment tools

#### 1 Scope and field of application

This part of ISO 4510 lays down, for guidance, the tool groupings commonly used for carrying out on-site, normal maintenance and routine adjustment work on earth-moving machinery as defined in ISO 6165.

Manufacturers should choose suitable tools from [table 1](#) for normal maintenance and routine adjustment work, and specify in suitable manuals, as described in ISO 6750, the type of tool to be used for carrying out such maintenance and adjustment work.

#### 2 References

ISO 263, *ISO inch screw threads — General plan and selection for screws, bolts and nuts — Diameter range 0.06 to 6 in.*

ISO 6165, *Earth-moving machinery — Basic types — Vocabulary.*

ISO 6750, *Earth-moving machinery — Operation and maintenance — Format and content of manuals.*

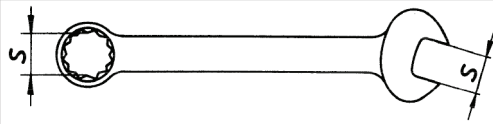
#### 3 Types and sizes

The metric and inch sizes shown under the heading "Nominal dimension" in [table 1](#) are not intended to be equivalent, but represent actual dimensional sizes for tools conforming to the metric and inch nomenclature. There is not, therefore, an automatic inch equivalent for every metric size shown.

#### 4 Application of hand tool groups

The annex outlines, in the form of general guidelines, when and how to apply the hand tool groups given in [table 1](#) intended for on-site normal maintenance and routine adjustment work on the machines.

**Table 1 — Common maintenance and adjustment tools**

No.	Nomenclature	Nominal dimension	Illustration
1	Combination wrench <sup>1)</sup>	$s =$ 8, 10, 12, 13, 14, 16, 17, 18, 19, 21, 22, 24, 27, 30, 32, 34 (5/16, 3/8, 7/16, 1/2, 9/16, 5/8, 11/16, 3/4, 13/16, 7/8, 15/16, 1 1/8)	
2	Engineer's wrench, single head	$s =$ 36, 41, 46, 50, 55, 60 (1 5/16, 1 1/2, 1 11/16, 1 7/8, 2 1/16, 2 1/4, 2 3/8)	