BRITISH STANDARD

BS 5708:1979

Specification for

Pruner shears (secateurs)

UDC 631.342.1

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Handle Manufacturers' Association
Incorporated British Institute of Certified Carpenters
Institution of Municipal Engineers
Post Office

This British Standard, having been prepared under the direction of the Mechanical Engineering Standards Committee, was published under the authority of the Executive Board on 29 December 1978

The following BSI references relate to the work on this standard:
Committee reference MEE/120/15
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Amendments issued since publication

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Contents

Foreword

This British Standard has been prepared under the direction of the Mechanical Engineering Standards Committee.

Pruner shears are often damaged by users who try to use the smaller ones for tasks for which they were never intended. Requirements are therefore given for classification by the cutting action and their intended use, as well as requirements for testing and safety.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 4, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for single and two-handed pruner shears, up to a nominal overall length of 380 mm, intended primarily for trimming shrubbery and similar woody growths.

2 Reference

The title of the publication referred to in this standard is given on the inside back cover.

3 Classification

3.1 Pruner shears shall be classified by their cutting action and their intended use and duty rating. Three main types of single-handed pruner shears are illustrated in Figure 1 and Figure 2.

3.2 The maximum pruning diameter intended for normal use for live wood pruning shall be as follows.

Duty rating	Diameter
	mm
Light duty	10
General purpose	16
Heavy duty	20

4 General requirements

4.1 Handles. The handles shall be made from a material capable of withstanding the load test specified in **5.1**.

Handles made from steel, aluminium or plastics, shall be free from burrs, rough edges and sharp corners and shall afford comfortable hand hold.

4.2 Pivot. The pivot shall be fastened in such a manner that there will not be any excessive looseness, sideways movement or binding when the pruner shears are opened or closed. The pivot shall be suitably locked so that it will not work loose when the pruner shears are in use.

The material used shall ensure that the pivot is free from defects after being subjected to the load test specified in **5.1**.

4.3 Cutting blades. The cutting blades shall be made from steel, suitably heat treated at the cutting edge to achieve a minimum hardness of 450 HV in accordance with the requirements of BS 427-1, measured halfway along the blade and not more than 3 mm from the cutting edge on either cutting face of the blade.

The cutting blades shall withstand the specified cutting and load tests.

4.4 Return spring (optional). The return spring shall be capable of opening the pruner shears from the closed position.

4.5 Safety catch. Pruner shears which are capable of opening freely of their own accord, with or without a return spring, shall be fitted with an easily operated locking device. The locking device shall prevent the pruner shears from unintended opening during normal handling or transit conditions.

5 Type testing

5.1 Load test. The fully assembled pruner shears shall suffer no permanent damage to any component as a result of applying the torque shown in Table 1, loaded as illustrated in Figure 2.

Table 1 — Applied torques

Light duty	34 Nm
General purpose	47 Nm
Heavy duty	60 Nm

5.2 Cutting test. Light duty, general purpose and heavy duty pruner shears shall be capable of cleanly cutting 10 pieces respectively of 6 mm, 8 mm and 10 mm hardwood dowel (ramin or similar). During this test the blades shall not chip or crack.

Following the above test, the pruner shears shall cleanly cut through 1 mm thick card at all points along the cutting edge of the blade(s).

5.3 Drop test. The pruner shears shall be capable of being dropped four times (once on each face) on to a concrete floor, from a height of 2 m, without impairing their efficiency. They shall again then meet the requirements of **5.2**.

The pruner shears shall be dropped in such a manner that the points of the blades do not directly strike the floor.

6 Safety

To ensure the safety of the user under normal handling conditions or during transit the following conditions shall apply.

6.1 The tips and edges of the blades of the pruner shears shall not present a point or cutting edge when in the closed position.

6.2 The return spring, where fitted, shall be positively located and be incapable of ejection in normal use.

6.3 All components and the final assembly shall be free from any burrs, sharp corners or rough edges which present any form of hazard to the operator in normal use.

6.4 Any finishing coat, covering or treatment shall have no harmful effects through contact with either skin or mouth.

7 Marking

Each pair of pruner shears shall be indelibly marked with the following particulars.

a) The number of this British Standard, i.e. BS 5708.

b) The name, trademark or other means of identification of the manufacturer.

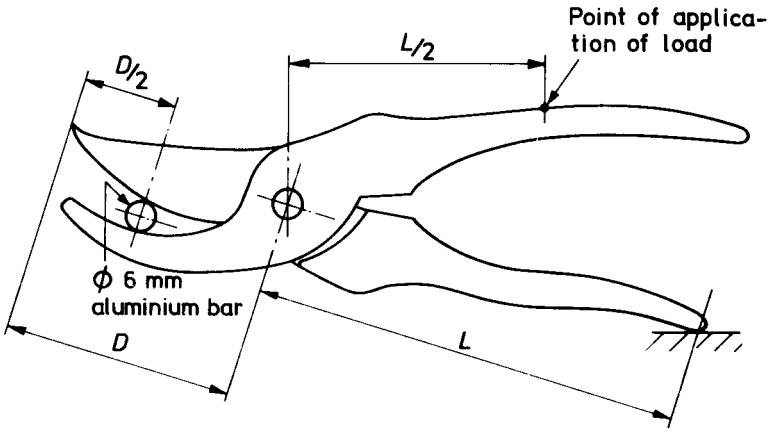
c) The duty rating. (Alternatively this shall be marked on the box.)

(a) Bypass

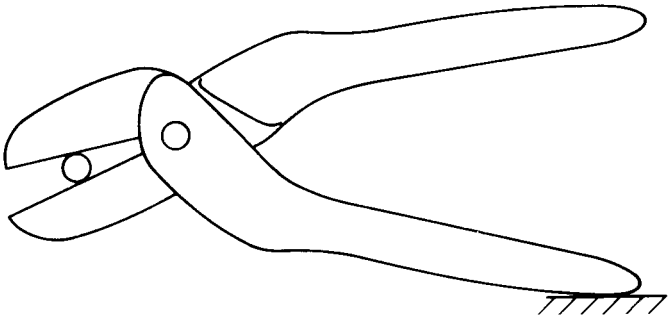
(b) Anvil

(c) Parrot beak

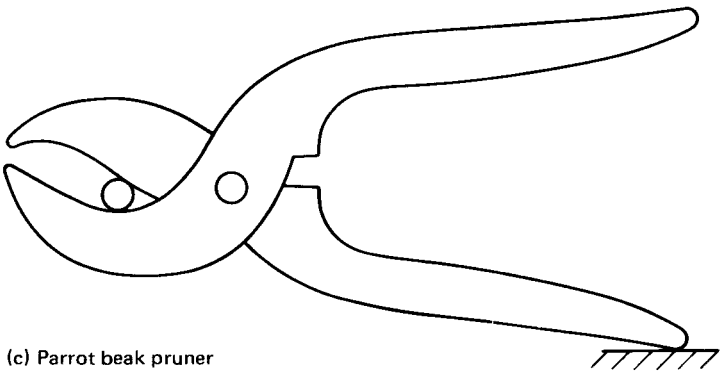
Figure 1 — Section through blades to illustrate cutting action



(a) Bypass pruner



(b) Anvil pruner



(c) Parrot beak pruner

Figure 2 — Pruner shears

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Publication referred to

BS 427, *Method for Vickers hardness test.*
BS 427-1, *Testing of metals.*

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