

# OPERATING INSTRUCTIONS

## Extruders and Adaptor Set

### 23-4200, 23-4250, 23-4300

<p><b>ELE International</b> Chartmoor Road, Chartwell Business Park Leighton Buzzard, Bedfordshire, LU7 4WG England phone: +44 (0) 1525 249200 fax: +44 (0) 1525 249249 email: <a href="mailto:ele@eleint.co.uk">ele@eleint.co.uk</a> <a href="http://www.ele.com">http://www.ele.com</a> ELE International, a division of Hach Lange Ltd.</p>	<p><b>Distributor:</b></p>	<p><b>ELE International</b> Soiltest Product Division PO Box 389, Loveland, CO 80539 USA phone: +1 (800) 323 1242 fax: +1 (970) 663 9781 email: <a href="mailto:soiltest@eleusa.com">soiltest@eleusa.com</a> <a href="http://www.eleusa.com">http://www.eleusa.com</a></p>
<p><i>In the interests of improving and updating its equipment, ELE reserves the right to alter specifications to equipment at any time</i> <b>ELE International 2003 ©</b></p>		

**Contents**

	<b>Section</b>	<b>Page</b>
<b>1</b>	<b>Introduction</b>	<b>3</b>
<b>2</b>	<b>Operation</b>	<b>3</b>
<b>3</b>	<b>Maintenance</b>	<b>4</b>
	<b>Figures 1 – 3</b>	<b>5 - 7</b>

## 1 Introduction

Both extruders comprise a frame into which is clamped a hydraulic jack.

**The Proctor/Core Cutter Extruder 23-4200 (Figure 1)** will extrude samples from the following ELE 100 mm (4") nominal moulds and core cutters:

24-9000 BS Standard Compaction Mould

24-9060 Proctor Mould

29-5300 Core Cutter (100 mm inside diameter)

45-6310 Compaction Mould (BS598 and ASTM D1559)

**The CBR Core Cutter Extruder 23-4250 (Figure 2)** will extrude samples from the following ELE 150 mm (6") nominal moulds and core cutters:

24-9198 BS CBR Mould Body

24-9228 ASTM CBR Mould Body

29-5400 Core Cutter (150 mm inside diameter)

**The Adaptor Set 23-4300 (Figure 3)** is used in conjunction with 23-4250 and enables those moulds and core cutters listed under 23-4200 to be extruded.

## 2 Operation

### 2.1 Extruders

The extruder top plate is recessed both sides to locate and centralise the mould or core cutter. Select the recess which provides the best location for the mould or core cutter to be extruded from. This location **must** be on the underside. If necessary reverse the top plate by removing the two retaining nuts, inverting the plate and replacing the nuts.

With the jack in its lowest position, raise the platen by unscrewing it until the mould or core cutter just fits between the platen and the underside of the top plate.

Place the mould centrally onto the platen ensuring that it fits into the bore of the mould or core cutter.

Close the jack release valve and insert the jack handle into the socket. Pump the handle up and down to raise the platen, while at the same time guiding the mould or core cutter into the recess in the underside of the top plate. Carry on pumping until the sample has been fully extruded from the mould or core cutter.

Open the jack release valve and return the platen to its lowest position when the empty mould or core cutter may be removed.

### 2.2 Adaptor Set

The adaptor set may be used with the CBR/Core Cutter Extruder in order to extrude samples from 100 mm (4") moulds and core cutters. See figure 3.

The adaptor plate is recessed both sides, select the required recess which must face downwards, then locate the adaptor plate into the central hole of the extruder top plate from the underside. Secure the adaptor plate to the extruder top plate with the two hand screws provided.

The extruder platen must also be replaced with the smaller platen supplied with the adaptor set. Remove the central retaining screw, change the platens and replace the screw.

The operation of the extruder with the adaptor set fitted is the same as for the

extruder on its own.

### **3 Maintenance**

Keep the equipment clean and dry, apply a rust inhibitor to all bright parts.

Occasional lubrication may be required on the jack ram screw extension and the pump toggle linkage.

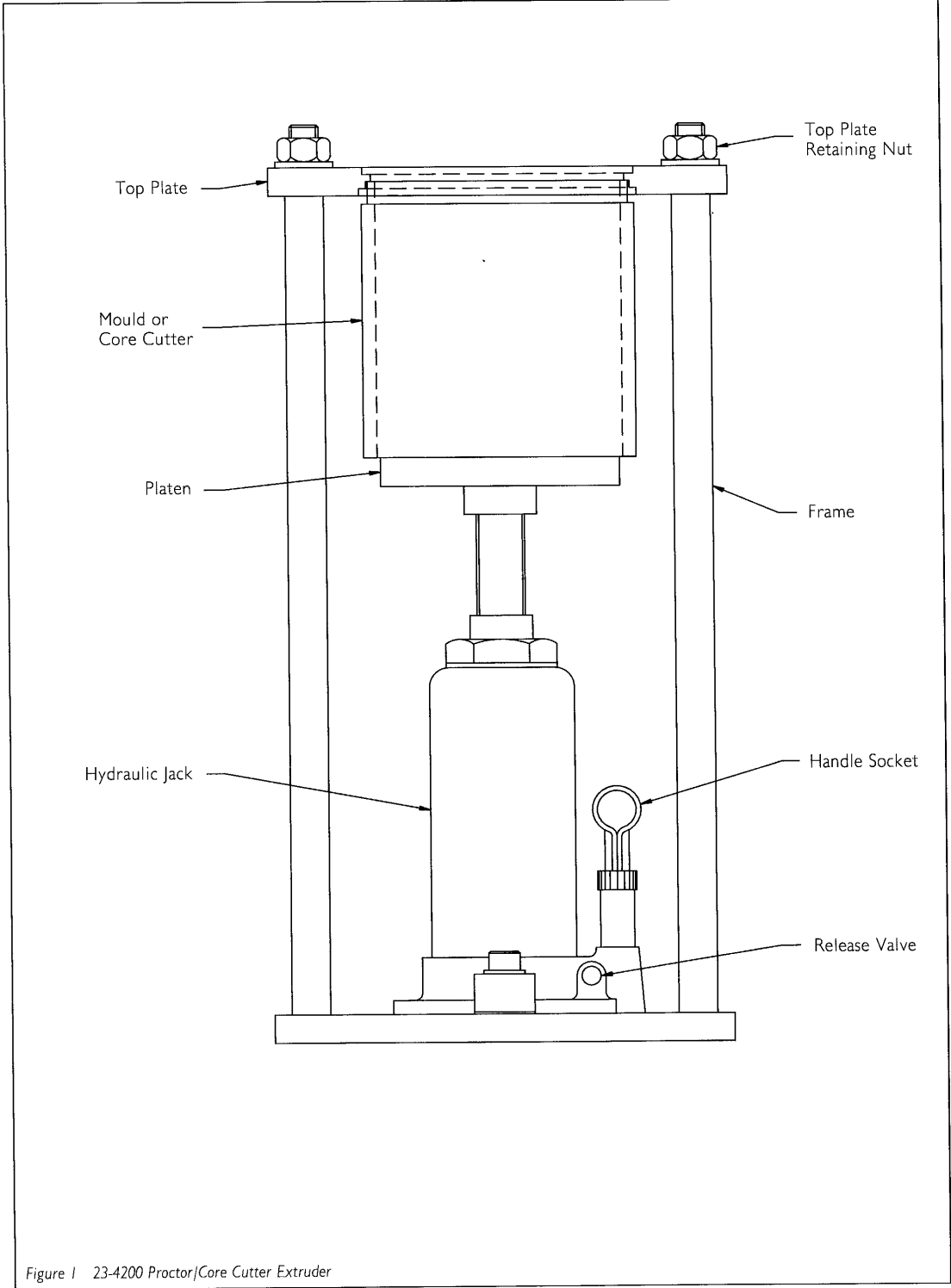


Figure 1 23-4200 Proctor/Core Cutter Extruder

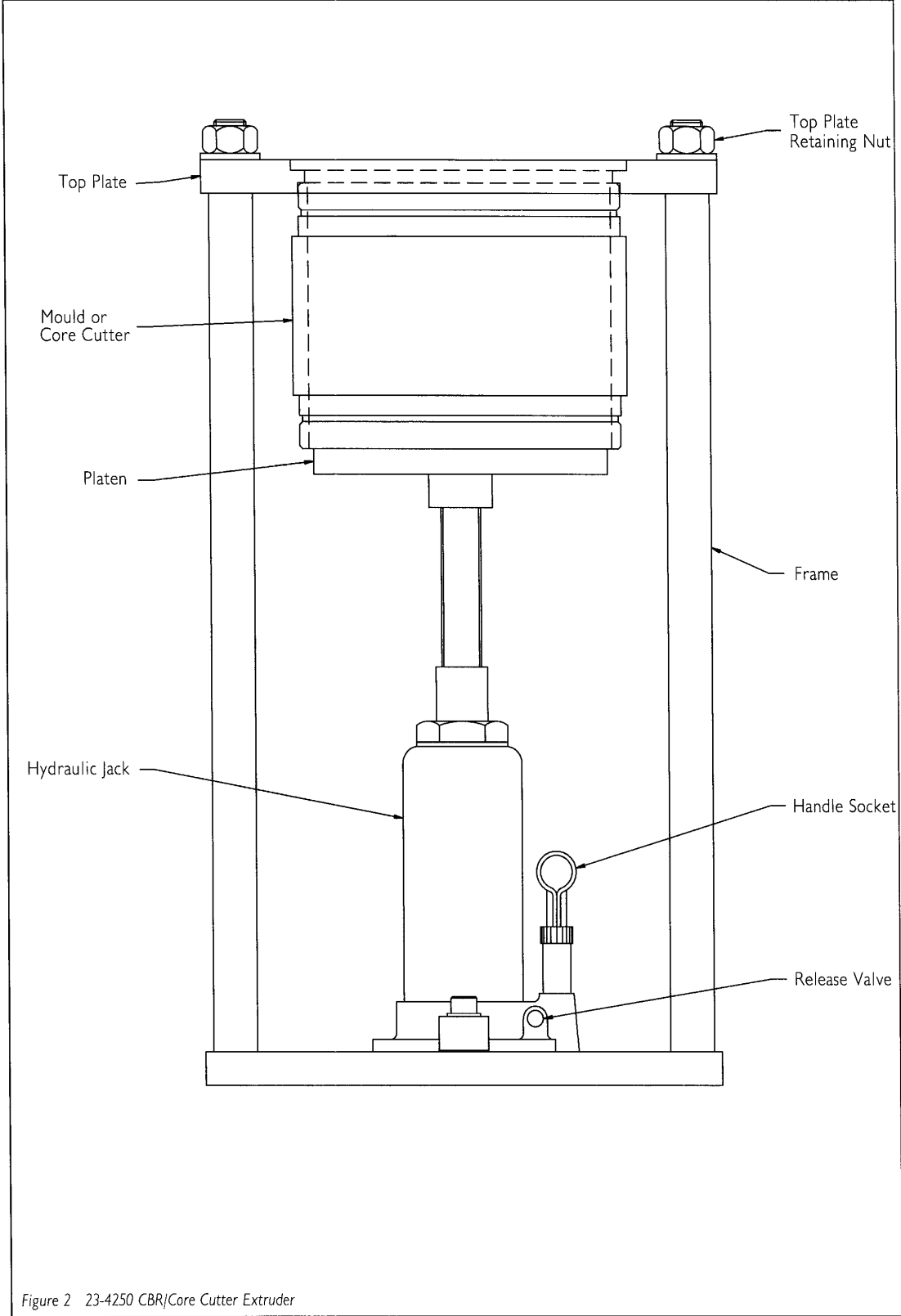


Figure 2 23-4250 CBR/Core Cutter Extruder

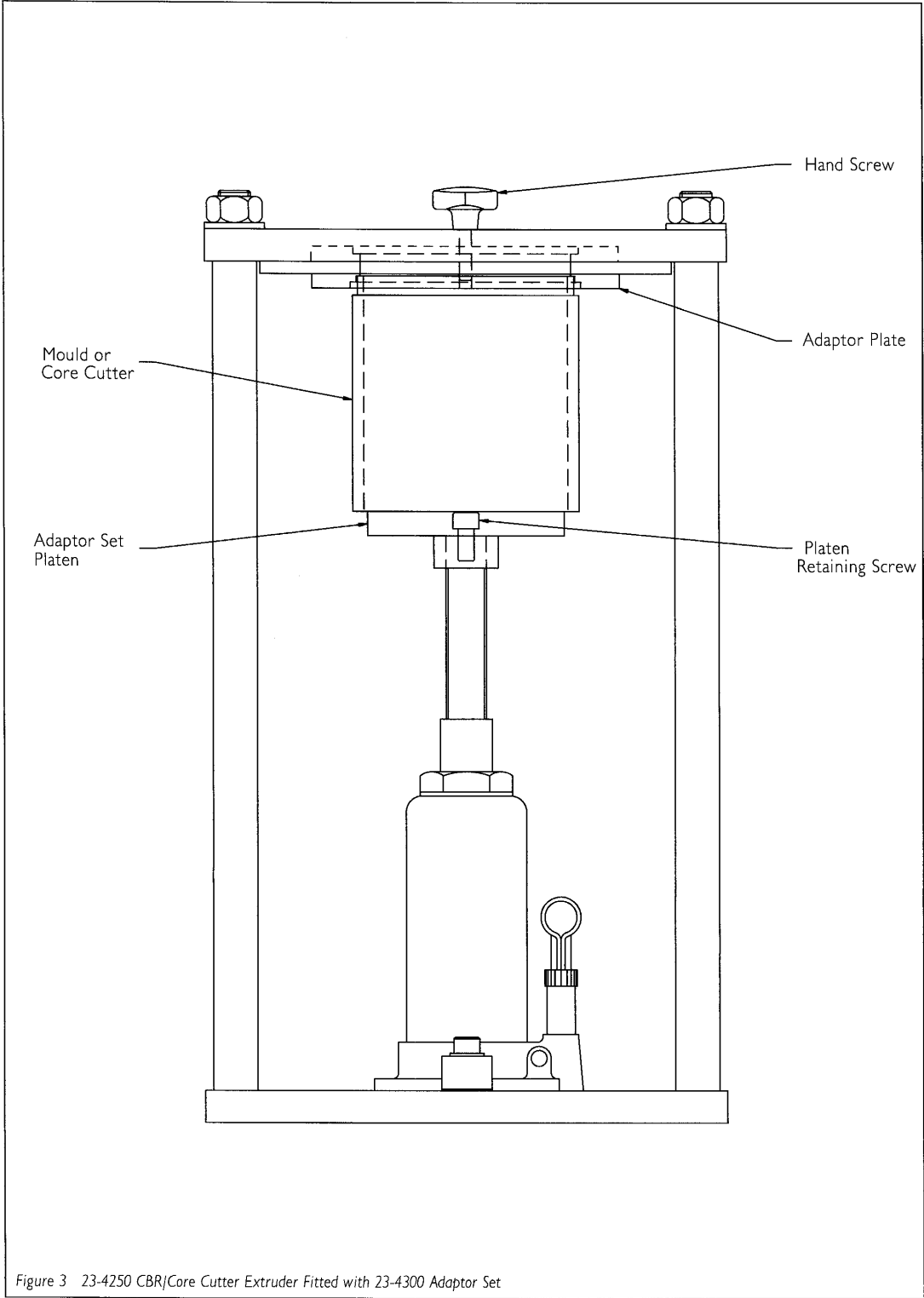


Figure 3 23-4250 CBR/Core Cutter Extruder Fitted with 23-4300 Adaptor Set