

OPERATING INSTRUCTIONS

Hand Operated Hydraulic Sample Extruder

23-4090

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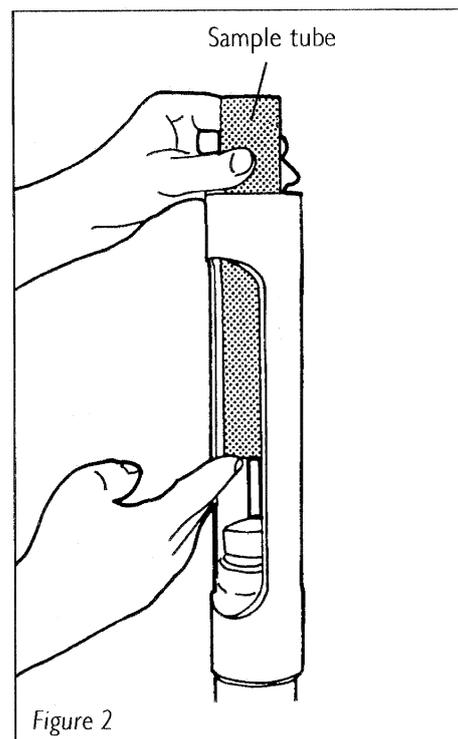
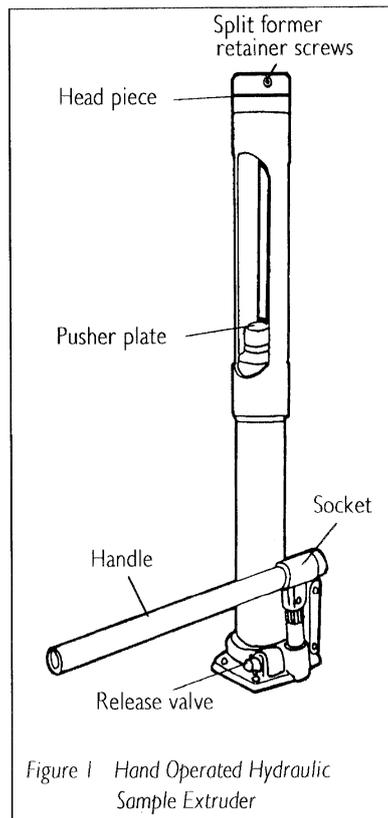
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1 Introduction

The sample extruder comprises a vertically mounted, lever action, hydraulic jack, with body extended to form a chamber which accommodates a standard 35 mm or 38 mm diameter sample tube. Supplied complete with trimming knife.

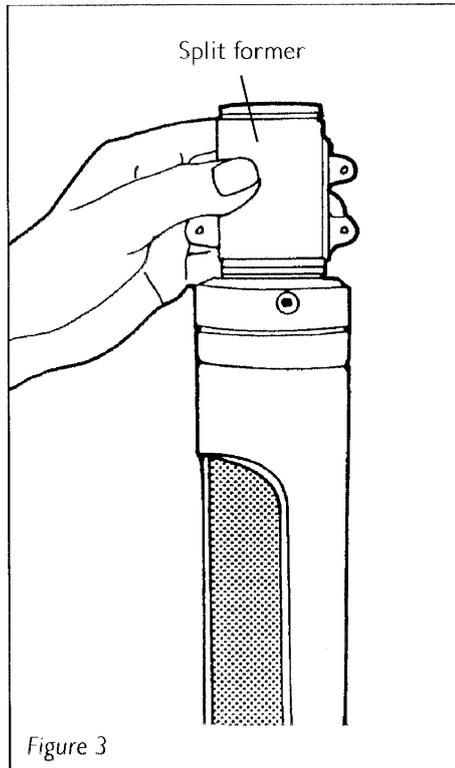
Specially designed split formers are available which accept the extruded specimen without additional handling. Cutting tools are also available for end preparation of the sample. The cutting tool is double ended enabling use with both the relevant size sample tube and the split former.



2 Operation

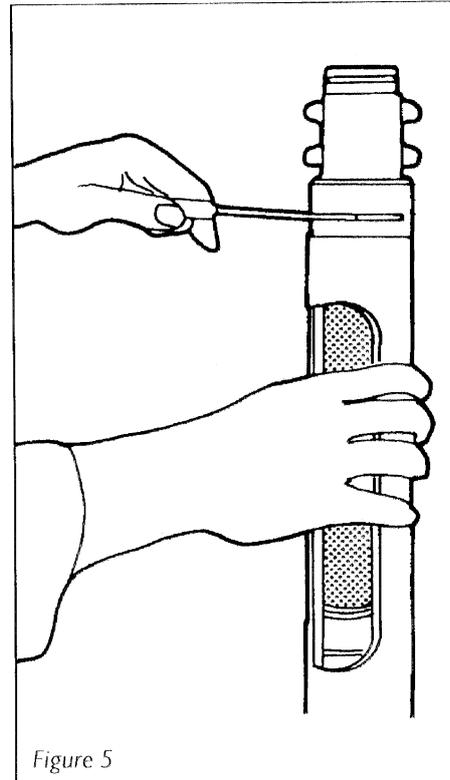
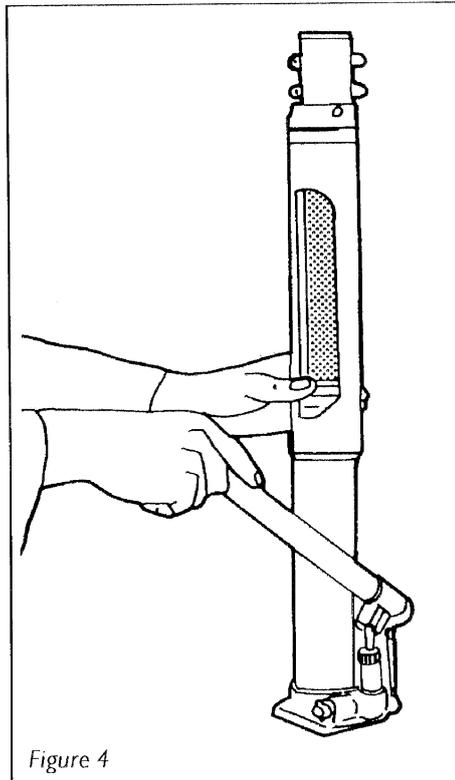
- 2.1 Ensure that the piston is fully down before starting. If it is not, unscrew the release valve at the base of the extruder (using the shaped end of the handle) one full turn. Press down on the pusher plate until piston bottoms.
- 2.2 Screw in the release valve fully.
- 2.3 Unscrew and remove the head piece.
- 2.4 Carefully lower the sample tube into the chamber, cutting end uppermost. Locate the other end of the tube over the pusher plate (see figure 2).
- 2.5 Replace the head piece and tighten into place.
- 2.6 Engage the handle in its socket and proceed to lift the sample tube by slowly pumping. At the same time guide the tube into its recess in the head piece until it sits squarely within the chamber.

- 2.7 Position split former in its recess on top of the head piece and retain with the two screws provided (figure 3).



- 2.8 With sample tube firmly in position continue pumping action, extruding the sample through the head piece and into the split former (see figure 4).
- 2.9 When the split former is completely filled and sample projects slightly beyond the end, cut through sample with trimming knife using the slot in the head piece as a guide (see figure 5).
- 2.10 Undo the retaining screws and remove split former. Trim ends of sample with trimming knife.
- Note:** sample tube should not be left in the extruder for prolonged periods.
- 2.11 Unscrew head piece and lift out sample tube (some pump action may assist) from chamber.
- 2.12 Clean all debris from around piston, especially from bottom of chamber, and head piece.

2.13 Screw on head piece and return piston to bottom of stroke as in 2.1.



3 Maintenance

- 3.1 Keep extruder clean at all times, in particular do not allow sample debris to become solid and build up at base of chamber, under the pusher plate. Keep the piston and its wiper seal clean. Seals for this apparatus are not available as spares.
- 3.2 After a prolonged period of use check the level of oil in the jack. This should be level with the filler plug in rear of jack casing when piston is fully down, extruder vertical.
- 3.3 Only use a light mineral oil, approximately grade SAE 20, and **do not** overfill. Keep oil and area around plug clean.
- 3.4 Occasionally apply a little medium grease to the pump plunger and threaded items.