

KINETIC RAM



Manufactured in the UK

THE
DYNAMIC
PIPE CLEARING
EQUIPMENT

THE DYNAMIC KINETIC RAM

Over the years this equipment has revolutionised the technique of clearing, hygienically and rapidly, partial or complete blockages from plumbing, drainage, industrial and other pipe installations.

What will the 'Kinetic Ram' do?

It will clear blockages - even severe ones - from all types of pipes up to 6" (152mm) diameter and is effective up to 150' (45m) or more.

It eliminates the need for rods, "snakes" and other traditional and cumbersome equipment.

It will, within minutes, clear blockages which might otherwise take hours to clear or which could be cleared only by extensive dismantling, digging or breaking down walls.

It will remove rust from hot or cold water systems, turning slow running taps into fast running ones.

It can be used by any handyman or unskilled employee.

Note: The applications of the Ram shown are those for which it is most generally used. It can, however be used for main drains and many industrial and other applications, on which we shall be glad to advise.

How does the 'Kinetic Ram' work?

Simply by an instantaneous "punch" of compressed air against a solid column of water in the blocked pipe. Water being incompressible, the impact of the "punch" of air sets up shock waves, which travel through the water in the pipe, laminating over each other at a speed approaching 4,000' (1,200m) per second. On meeting the obstruction, the shock waves disintegrate or eject the obstruction, which the water immediately flushes away.

Other advantages are:

- The shock waves will follow the course of the water, whatever the shape of the pipe, bends and vents presenting no problem - the Kinetic Ram will, in fact, clear a blockage in a spiral pipe.
- Only negligible pressure against the side walls of the pipe is involved, as only 2% to 4% of the energy dissipates against the sides. There is therefore no danger of damage to piping - the equipment is SAFE.

How to use the 'Kinetic' Ram Pressurising the equipment

Insert the nozzle into the rubber cone to prevent damage to the thread of the discharge pipe, stand the equipment on the floor, with the cone held between the feet (Fig. 1), place both hands on the pump operating knob and let the weight of the body do the work. The equipment may also be charged, by means of the Schrader valve set into the top of the Ram,

Fig. 1



from a compressor or air line. It is impossible to over-pressurise the equipment as the Ram is fitted with a safety valve.

IMPORTANT: When operating the Ram, always 'SNAP' the air release trigger - do NOT squeeze it.

Basins and sinks

Before operating the Ram, block the overflow firmly by feeding rag into the outlet with a screwdriver or similar tool, leaving an end of the rag free. Then place the appropriate size plug on to the discharge pipe of the Ram, insert this into the waste pipe outlet, hold the Ram firmly into place and SNAP the trigger. If the pipe is only partially blocked, attach the water hose as shown in Fig 2, turn on the water tap, allow a short time for the pipe to fill and operate the Ram through the running water.

Note: Whenever the Ram is operated, a recoil of shock waves from the blockage occurs. This may lift the Ram a fraction of an inch and dissipate water from the pipe. To prevent the operator being splashed, wrap sacking or other material round the plug after it has been inserted in the pipe or use the protective covers provided as an optional extra for the purpose.

For sinks and basins, use a pressure of 60 to 80 lbs/4 - 5.5 Bar and increase if necessary, but not above 100 lbs/6.9 Bar per square inch.

Back to back combination sinks or basins

When clearing blockages in 'back-to-back' sinks or basins discharging into the same main outlet pipe, precautions must be taken to prevent blowback into the opposite sink or basin. This is done by inserting the waste plug of the opposite sink firmly into the waste outlet, filling the sink with water and feeding rag into the overflow, which will then operate as a flap valve. It is also effective to lay sacking or dirty linen over the whole of the opposite sink or basin (Fig. 3) (i).

Similarly, when clearing blockages in combination sinks or WCs, precautions must be taken to contain blowbacks in all sinks or WCs discharging into the same common waste pipe (Fig. 3) (ii).

Use a pressure of 60 to 80 lbs/4 - 5.5 Bar and increase if necessary, but not above 100 lbs/6.9 Bar (Fig. 3).

Waste pipes in showers, urinals, etc.

Apply Ram through expanding plug, 4½" (115mm) rubber cone or other plug suitable for the pipe to be cleared.

Use a pressure of 100 to 150 lbs/6.9 - 10.3 Bar (Fig. 4).

Bath tubs

Proceed as for clearing sinks and basins except that a rag can be held firmly over the overflow outlet instead of the feeding the rag into the outlet. Attach appropriate sized plug to the Ram and hold this into the outlet with the full weight of the body.

Use a pressure of 80 to 100 lbs/5.5 - 6.9 Bar. (Fig. 5).

Clearing a clogged toilet

Charge Ram to 100 lbs/6.9 Bar, attach 6½" (165mm) rubber cone and insert firmly into waste pipe opening. Put full weight of body on Ram and snap the trigger.

If the toilet is only partly blocked by an object such as

Fig. 2

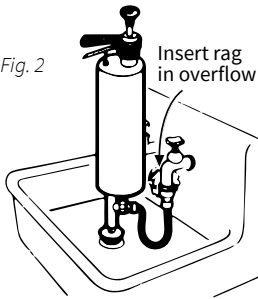


Fig. 3

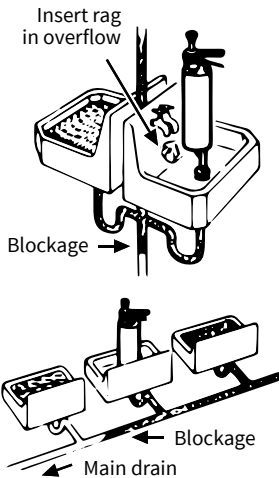
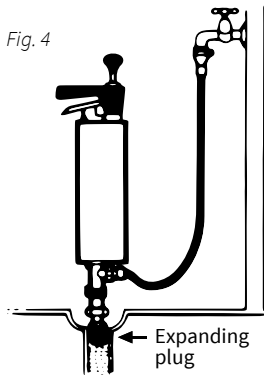


Fig. 4



a toothbrush or pencil, form a loose wad of a single sheet of double spread of newspaper, push this well into the outlet pipe and operate the Ram as above. The wad of paper will be projected along the pipe and will shatter the brush or pencil.

Use a pressure of 100 lbs/6.9 Bar and increase if necessary (Fig. 6).

How the 'Kinetic Ram' cleans the entire pipe

A pipe may be only partly blocked; nevertheless, the water supply hose leading from the cold water tap to the Ram, when turned wide open, will supply water faster than it drains off. With the appropriate attachment of the Ram firmly sealing off the pipe opening, the water enters all crevices and pockets, then when the Ram is operated, the impact pulverises all waste, which is flushed away by the water in the pipe.

Where to apply the Ram

Always apply the Ram at the nearest available point to where the blockage is or is thought to be. Where there is more than one outlet, apply the Ram where the water backs up first (Fig. 7).

Removal of rust and corrosion from hot and cold water pipes

For effective results, the following instructions must be observed closely:

- (1) Turn off the water supply at the nearest stop cock and remove the jumper bit from the tap of the pipe to be cleared;
- (2) Charge Ram to 100 lbs/6.9 Bar
- (3) Clamp connector hose over tap by means of the tap adaptor and connect the other end of the hose to the discharge pipe of the Ram;
- (4) Open stop cock;
- (5) Open tap wide and grasp the tap adaptor firmly on the tap with one hand;
- (6) With the other hand, SNAP the trigger of the Ram several times in quick succession. SNAP the trigger rapidly - not hold it open.
- (7) When the pressure in the Ram is almost exhausted, remove the connector hose and tap adaptor and allow rust and corrosion to wash out.
- (8) If necessary, repeat the operation. (Fig. 8).

Maintenance of Ram

The 'Kinetic Ram' requires little maintenance except the following:

- Always clean the Ram immediately after use;
- Apply a few drops of leather oil to the pump leather once every two months;
- Clean rubber accessories, after use, in hot soapy or detergent water.

Fig. 5

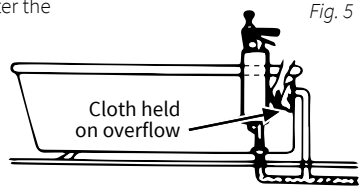


Fig. 6

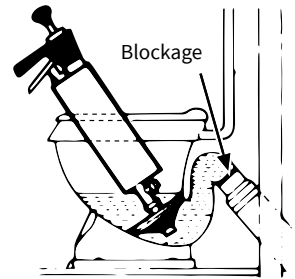


Fig. 7

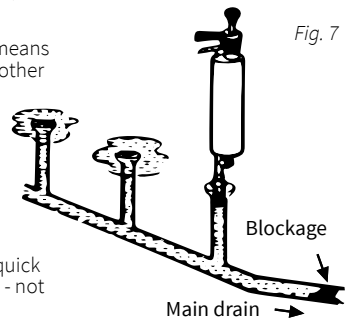
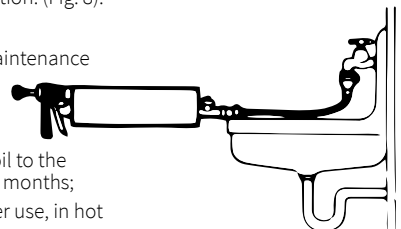


Fig. 8



KINETIC RAM ACCESSORIES



Standard Kit comprises of:

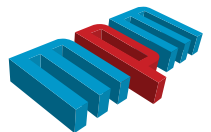
- 1 Kinetic Water Ram
- 2 18" (450mm) Connector Hose
- 3 48" (1.2m) Water Inlet Hose
- 4 Tap Adaptor and Hose Clip
- 5 4½" (114mm) Rubber Cone
- 6 Set of 5 Taper Sink Plugs

Complete Kit comprises of Standard Kit plus:

- 7 2" (50mm) Expanding Plug
- 8 3" (76mm) Expanding Plug
- 9 4" (101mm) Expanding Plug
- 10 6" (152mm) Expanding Plug
- 11 ½" (12.7mm) BSP Connector for Expanding Plug
- 12 6½" (165mm) Rubber Cone
- 13 Strong, Airtight, Plastic Carrying Case

Extra Kit comprises of Complete Kit plus:

- 14 5" (127mm) Expanding Plug
- 15 1½" (38mm) Expanding Plug



For servicing instructions go to:
microplasmouldings.com/downloads

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