

Once the correct temperature has been attained, make a visual inspection of the the pipe by checking if frost has formed around the work.

Warning

Do not touch the clamps with unprotected hands when the machine is running . The temperature of metal parts reaches –30°C.

Only cut into the pipe when you have made certain that pipe has been frozen, after checking the readout and the time-elapsd as described on the graph. For extra security, add an additional 30% on the time stated on the guide.

The machine must remain ON for the duration of the job from cut to connect.

When the job is finished switch off the freezer and wait for the clamps to defrost.

Never pull the clamps from the work when showing signs of frost.

Never ply or pull the hoses.

EQUIPMENT CARE

Hang up the clamps after use to allow oil to drain down into the compressor unit.

Leave the cloths to dry ready for return to HSS Hire.

Never push the equipment beyond its design limits. If it will not do what you want with reasonable ease, assume you have the wrong tool for the job. Ask at your local HSS Hire Shop for advice.

Handle the equipment with care. Avoid dropping it, knocking it, or otherwise exposing it to damage.

Never expose the equipment to excessive moisture, dust or dangerous/corrosive chemicals.

Keep the equipment clean. You will find this less of a chore if you clean up regularly rather than wait until the end of the hire period.

When not in use, store the equipment somewhere clean, dry and safe from thieves.

FINISHING OFF

Switch OFF the power supply and then the compressor.

Allow the clamp/s to completely defrost before removal. Remove the thermostat cable and coil this neatly and place the clamps on their storage bars.

Replace the reduction inserts into their case. Dry, and return the cloths.

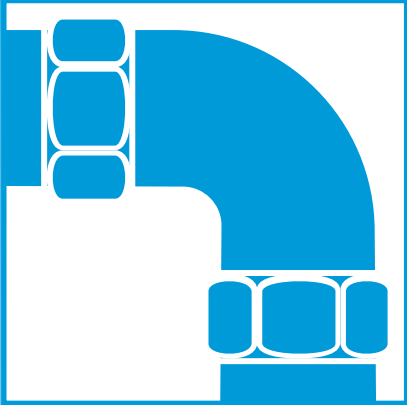
Finally, neatly coil the cable and replace the top cover ready for return.



©HSS Hire Service Group Plc 1996 No. 587/01
Group Office: 25 Willow Lane, Mitcham, Surrey CR4 4TS

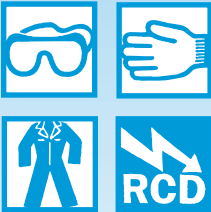
Operating & Safety Guide 587

HSS Hire Shops



Pipe Freezing Kit (Electric)

For the efficient freezing of water in smooth surfaced pipes of copper and iron, for repairs or extensions – no need to drain down the water system.



Code 68812

GENERAL SAFETY

For advice on the safety and suitability of this equipment contact your local HSS Hire Shop.

Keep children, animals and all others out of the work area.

Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

This equipment should only be used by a competent person who has read and understood these instructions.

Check the equipment before use, if it shows signs of damage or excessive wear, return it.



Skin must be covered – protective clothing, footwear and gloves must be worn. **Gloves are essential** as skin will freeze and stick to a frozen pipe.



Safety goggles should be worn by anyone in the work area. Avoid loose garments and jewellery that could interfere with the work. Tie back long hair.

Ensure work area is tidy, well lit and ventilated.

Always transport, store and operate the machine in an upright position.

Keep the unit's air vents clear of all obstructions.

If the equipment fails, or if its flex or plug is damaged, return it. Do not attempt to repair it yourself.

Warning

BEFORE PROCEEDING, CONSULT A QUALIFIED PLUMBER/HEATING ENGINEER.

Do not use this equipment on gas pipes or conduit carrying electric cable. It must only be used on water bearing iron or copper pipes.

Remember to stop the waterflow in the pipework. It is not possible to freeze pipes carrying hot or running water or water containing anti-freeze.


ELECTRICAL SAFETY

Most HSS equipment is designed to plug straight into a standard 240V 13A power socket.

This equipment must not be powered from a generator.

Keep flexes and extension leads out of harm's way. Extension leads should be fully unwound and loosely coiled away from the equipment. Never run them through water, over sharp edges, or where they could trip someone.

Remember, using electrical equipment in very damp or wet conditions can be dangerous.

 To reduce the risk of electric shock, use a suitable RCD (Residual Current-Operated Device) available from your local HSS Hire Shop, or power the equipment from a mains circuit with a built-in RCD.

Never carry or pull the machine by its flex.

GETTING STARTED

Ensure the waterflow in the pipework has been stopped and where applicable, wait for hot water to cool to room temperature.

Set the compressor unit close to the work area and convenient to a suitable power supply. Ensure the machine/work area will not be affected by the discharge from a ventilator blowing warm air.

Allow the unit to settle for at least 15 minutes.

Only straight sections of pipe can be frozen, these should be free from paint or grease to allow good conductivity at the point/s to be frozen.

Unclip and remove the top cover. Unpack the clamps (2 per unit), the reduction inserts and covers.

The thermostat will give an approximate indication of the pipe's temperature.

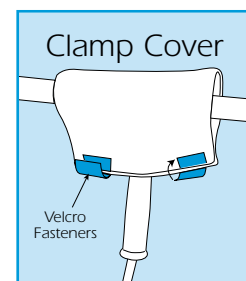
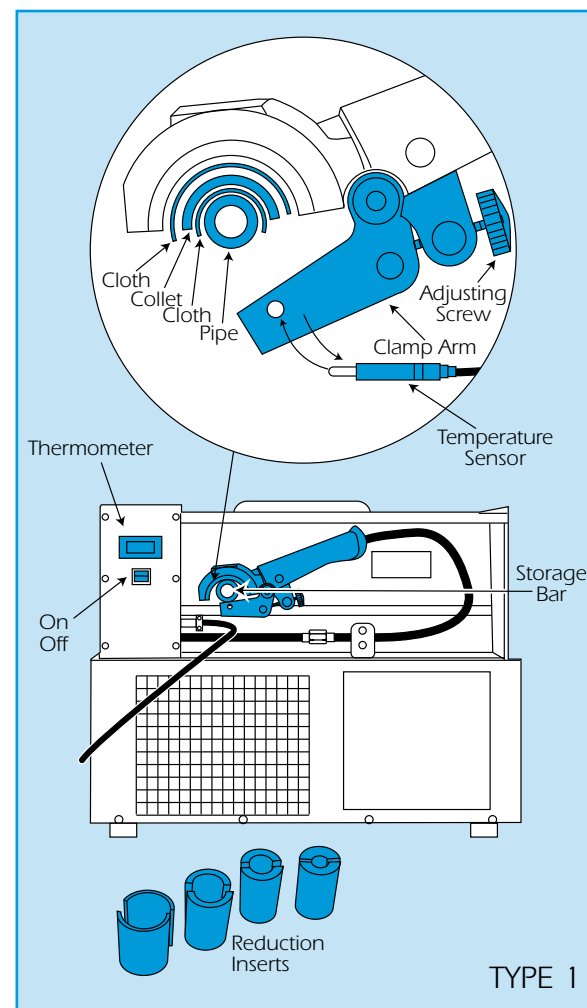
Select the reduction insert according to the pipe size. The freeze clamps are designed to fit directly to 42mm pipe – for freezing pipes of smaller diameter use the reduction inserts supplied. **These must be kept clean and stored in their storage container when not in use.**

TYPE 1

Soak the cloths supplied in water and apply these:
1. **between the clamp and the reduction insert** –
2. **between the reduction insert and the pipe.** You will need 1/2 a reduction insert per clamp for this system.

Make sure there are no folds in any of the cloths. Do not use any other cloth material as a substitute. The equipment will fail if the cloths are installed incorrectly.

Apply the freeze clamp/s to the pipe, adjusting the clamp tension by turning the adjusting screw finger tight only. Excess pressure may dent copper pipe or break the clamp arm.



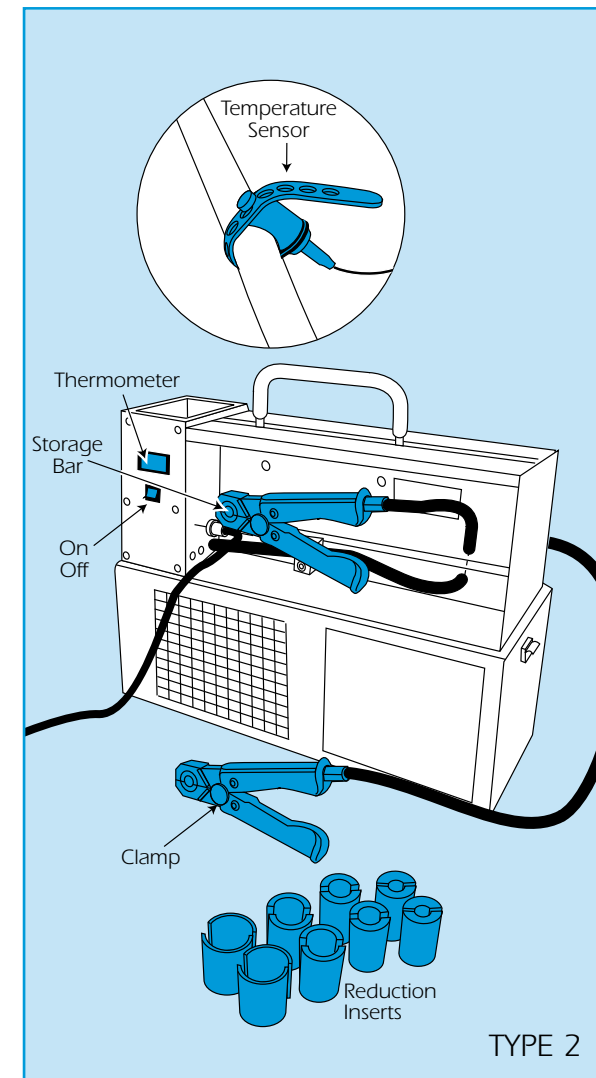
Locate the thermometer into the hole on one of the clamps. Fit the clamp cover over the clamp and pipe.

TYPE 2

Smear contactor paste (supplied), 1. **between the clamp and the reduction insert**, 2. **between the reduction insert and the pipe.**

You will need to use two reduction inserts for each spring loaded clamp.

The thermometer is separate to the clamp and should be clipped on the pipe as near to the clamp as possible (see diagram).



With the freeze clamp in place, check the thermometer is correctly fitted, then place the cover over the clamp and pipe.

BASIC TECHNIQUES

Switch the power ON and then the machine.

The graph on the compressor unit, below the ON/OFF switch gives a guide to the time required for freezing pipes of varying diameters (iron and copper only). The graph is based on a room temperature of 22°C.

Check the digital readout above the ON/OFF switch for the temperature attained.