

## Electronic Pipe Freezing Kit

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

### FINISHING OFF

Switch **OFF** the power supply and then the compressor.

Allow the clamp/s to completely defrost before removing the thermostat cables.

Clean then replace the reduction inserts into their tray.

Finally, neatly coil the cable and close the top cover ready for return to your local HSS Hire Shop.



#### ... have you been trained

The law requires that personnel using this type of equipment in the workplace must be competent and qualified to do so.

Training is available at HSS Training  
0845 766 7799

#### ...any comments?

If you have any suggestions to enable us to improve the information within this guide please e-mail your comments or write to the Safety Guide Manager at the address below  
e-mail: [safety@hss.com](mailto:safety@hss.com)

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Locate a thermometer into the hole in the end of each adjusting screw on the clamps.

All that remains is to **plug the unit into its power supply and switch the supply ON.**

### BASIC TECHNIQUES

Switch the machine **ON.**

Check the digital readouts to the left of the **ON/OFF switch for the temperature attained.**

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

### Protect your Hands

**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.

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 remove the clamps from the work when showing signs of frost.**

**Never ply or pull the hoses.**

### EQUIPMENT CARE

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

**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.

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

**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.**


## GENERAL SAFETY


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

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Keep children, animals and bystanders away from the work area.

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

 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.

 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.

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

Note that this machine uses R404a Refrigerant (CFC FREE).

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.

## 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.

Never carry, lift or pull the equipment by its power supply cable.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to your local HSS Hire Shop.

## ELECTRICAL SAFETY

HSS Electronic Pipe Freezing Kits are designed to plug straight into a standard, 240V 13A power socket.


However, 110V models (with a round yellow plug) must be provided with a suitable 110V generated power supply, or powered from the mains via a suitable 110V transformer.

If the equipment fails, or if its flex or plug becomes damaged, return it. Never try to repair it yourself.

Keep flexes out of harm's way, and clear of the work area.

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.

Keep the equipment dry, 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.

Ensure the Electronic Pipe Freezing Kit and power socket are switched OFF before plugging into the power supply.

## GETTING STARTED

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

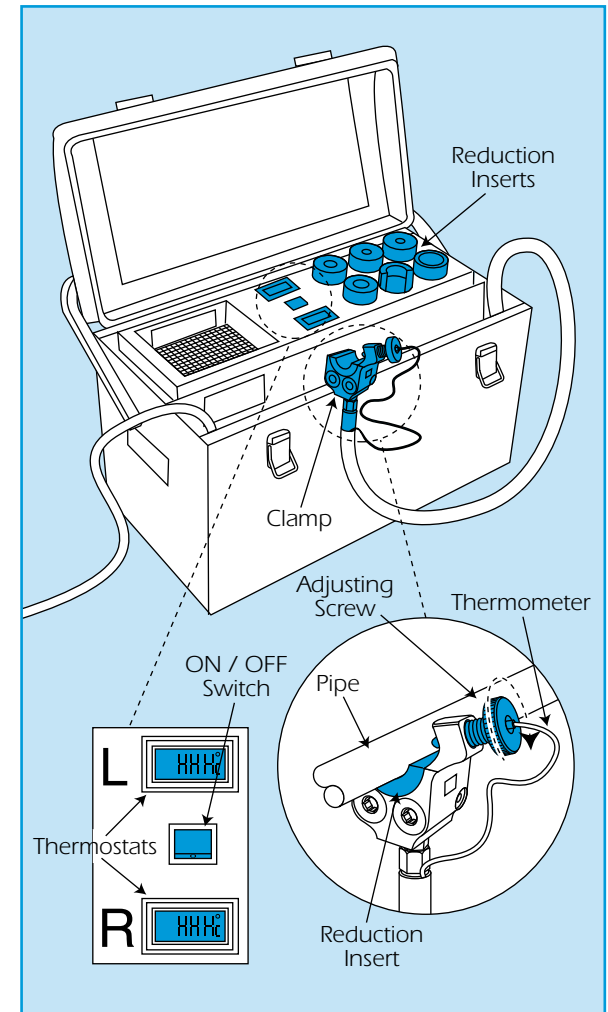
Set the compressor unit close to the work area and convenient to a suitable power supply. Ensure the machine/work area will not be affected by the discharge from a ventilator blowing warm air.

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.

Insert size mm	Equivalent BSP
12mm	na
15mm	1/4"
18mm	3/8"
22mm	1/2"
28mm	3/4"
35mm	1"

Unclip and hinge back the top cover. Unpack the 2 clamps and the reduction inserts which correspond to the size of pipe being worked on.



The thermostats 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 copper and 1.1/4" iron pipe.

For freezing pipes of smaller diameter use the reduction inserts supplied (see Chart). These must be kept clean and stored in their storage compartment when not in use.

You will need 1/2 a reduction insert per clamp for this system.

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

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.

# Know Your Symbols

HSS have created clear Icons to inform the hirer of their responsibilities towards the safe use of hire equipment.

These are designed to reduce the amount of different safety information labels required for each product for hire.

## General use PPE / Warning

Clearly marked minimum PPE will be visible on all equipment,



Correct PPE must be worn



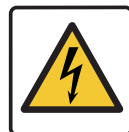
HAV Hand Arm Vibration



Danger Rotating blade



Danger Hot exhaust



Danger Electric shock



Caution Abrasive Wheel



Caution Finger trap

## Fuel and Supply Types



Pe  
Petrol



Di  
Diesel



2t  
2 - Stroke Petrol



EI  
Electric

## Safe Procedures

All hirers must understand and respect the safe procedures of all equipment.

It is the responsibility of the hirer to maintain and return the equipment in a clean condition and good working order.



Ro  
Read OPS Guide



Ou  
Outdoor Use only



HI  
Heavy Lifting



Cd  
Check Oil daily



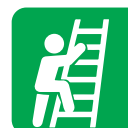
Cf  
Check Fuel daily



Cw  
Check Water daily



Bc  
Battery Care



Sh  
Safe Height Working



Swl  
Refer to Data Plate



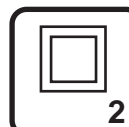
V  
Check Power Voltage Data Plate

## Electrical Safety

Safe wiring procedures.



Ea  
Must be Earthed Class 1



Doi  
Double Insulated Class 2



Enl  
Earth Live Neutral Wire Coding

## Return Responsibility

Charges apply to equipment returned dirty and damaged.



Cc  
Cleaning Charge



Rc  
Repair Charge