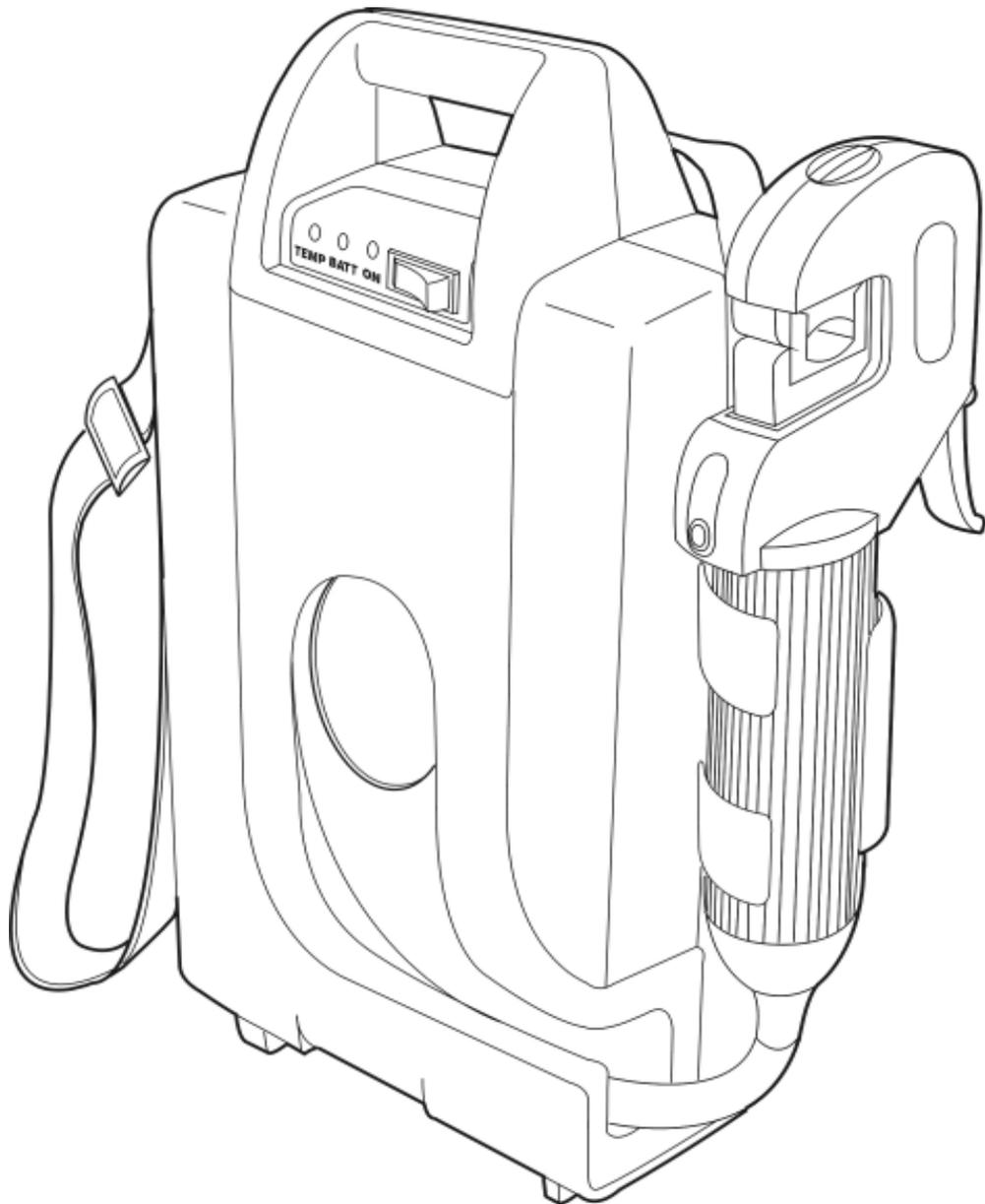


# System PH 1500

## Instruction Manual



## Introduction

The PH 1500 is a revolutionary design incorporating the latest in application tool technology. The system size, weight and power source allows it to be mobile, both in the field and on the plant floor. The PH 1500 is designed for crimping and may not be used for other applications.

**Before using this equipment it is essential that you study this manual and become fully acquainted with the safety rules.**

## Guarantee

This equipment is intended for professional, mobile and intermittent use. The equipment consists of the components included in System PH 1500, base unit PU 250, press head and set of flexible tubing PH 1500, battery BP 1400, battery charger BC 122 and battery eliminator/adaptor PC 220. The components and performance of the equipment are guaranteed by Pressmaster Tool for a period of one (1) year from the date of the first end-user's purchase of the equipment from Pressmaster Tool ("PMT") or from an authorized PMT distributor, providing that the equipment was unused prior to purchase.

During the period in which the guarantee is valid, PMT or an authorized PMT service technician agree to repair or replace any equipment which, in the professional opinion of PMT or an authorized PMT service technician, is deemed not to be in correct working order. This is only applicable if the equipment is returned with the battery removed, well packaged and carriage paid to PMT or an authorized PMT service technician. The equipment should be accompanied with details explaining the nature of the defect and customer name, address, and telephone number, as well as a receipt/invoice or any other document which confirms the date of the first end-user's purchase. Repairs or replacement may be delayed if parts have to be procured from another country.

If, after troubleshooting, the returned equipment is found to be in correct working order, according to the professional opinion of PMT or an authorized PMT service technician, PMT or the authorized PMT service technician shall return the equipment, against remuneration for troubleshooting, packaging and return carriage, to the address provided by the customer.

The guarantee shall not be valid if the equipment is damaged as a result of an accident, negligence, incorrect usage, wear and tear, connection to a tool which is not approved by PMT, transportation to or from PMT or an authorized PMT service technician, the customer not fulfilling his/her obligations arising from this guarantee or following service, modification or other damage not pertaining to PMT or authorized PMT service technicians.

PMT shall, by no means, be held responsible for direct or indirect injury, not even if PMT's representatives have been aware of the risk of such injury. Excluding the above, PMT shall not either be responsible for lack of profit, expenditure, economic loss, economic claims or other costs arising from defective equipment.



NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Pressmaster Tool reserves the right to alter the specification and design without prior notice. Information in the manual is checked with regard to correctness and conformance. However, Pressmaster Tool does not accept responsibility for errors of any kind in this manual.



**Service and repairs**

The System PH 1500 is designed for optimum service life in its range of application when used as described in this instruction manual. Damaged or worn parts should be properly repaired or replaced when needed. Service/inspection should be carried out regularly. Instructions given in this manual with regard to maintenance and safety should be consistently followed.

System PH 1500 is based on a complex and integrated design and it requires special-purpose tools and competent attention for repairs or service. Such work should always be carried out by Pressmaster Tool or by a service workshop or agent duly authorized by Pressmaster Tool. There is nothing concerning the base unit or tools that you can, should or attempt to repair other than as stated in this manual.

**You should not attempt to repair the System PH 1500 or any of its components or accessories, except as permitted in this instruction manual. Any attempt to repair or modify the System PH 1500 or its component parts or accessories will void the product warranty and relieve Pressmaster Tool of any responsibility or liability for the System PH 1500 or its component parts or accessories.**

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## EC Declaration of Conformity

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EC Declaration of Conformity

We declare that the product  
System PH 1500

Conform to:

72/73/EEC, 93/68/EEC Low voltage directive  
89/336/EEC, 92/31/EEC EMC directive  
89/392/EEC, 91/44/EEC Machine directive

Pressmaster Tool AB  
Box 3, 796 21 Älvdalen  
Sweden

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## Safety rules

### Essentials concerning safety

Study the safety rules carefully and **SAVE** these instructions so that they always accompany the equipment.

### Rules, codes

System PH 1500 should only be operated in full compliance with all applicable national and local codes and rules, employer instructions and policies, and with the care of common sense that should always be used when handling electric/hydraulic equipment with moving parts.

### System PH 1500, range of use

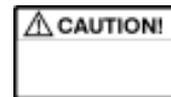
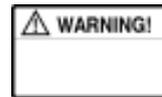
System PH 1500 is intended for mobile, intermittent use by professionals. The base unit may only be used together with tools that are approved by Pressmaster Tool. Never use the PH 1500 with tools or parts that have not been approved by Pressmaster Tool as personal injury may result.

The equipment is intended only for crimping. All other use are prohibited.



### Warnings and their significance

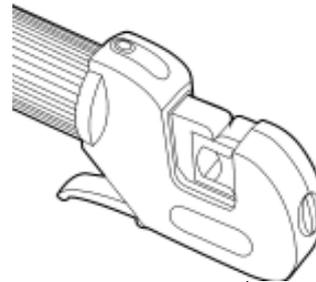
The warning signs found on the base unit, tools, and in the instruction manual are of two types and are most often accompanied by text or an illustration. The general significance of the wording is demonstrated by the following text and the appearance of the warning signs is shown in the illustration.



Examples of the appearance of warning signs.

**⚠ WARNING!** Potentially dangerous situation or operation which, if not avoided, can lead to very serious personal injury.

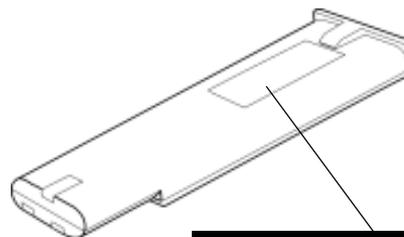
**⚠ CAUTION!** Potentially dangerous situation or operation which, if not avoided, can lead to serious or minor personal injury.



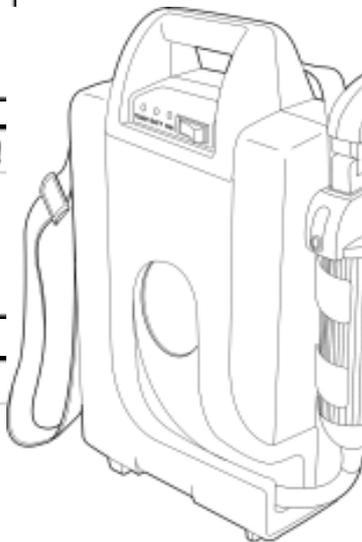
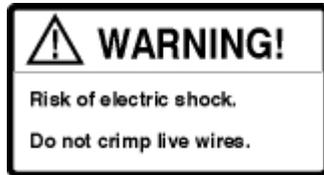
Warning sign on the tool head

### Warning signs

The base unit, tool and battery are fitted with warning signs to make you aware of incorrect handling or other hazards. Locations of the warning signs are shown by the illustrations in this manual. Study the signs and the equipment so that you are well aware of the significance of the warnings.



Warning sign on the battery



Warning signs on the front of the base unit, under the cover.



Type sign with data

Warning signs on the back of the base unit.

### Safety rules, general

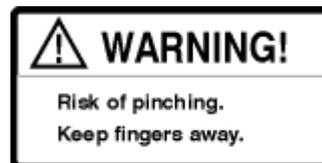
- Never put your fingers or any foreign object between the dies or die nest area of the tool.
- Safety goggles must be worn when working with the equipment.
- Do not crimp live wires.
- Do not expose the hose and connecting cord to heat, oil or sharp objects. The hose contains hydraulic fluid under high pressure which in the event of leakage can cause injury. Be aware of the risk of falling over hoses and cables.
- The use of accessories other than those approved by Pressmaster Tool may give rise to serious personal injury and are therefore not allowed.
- Never turn the tool head past its limited range of movement. This could otherwise seriously damage the electric and hydraulic connections with the resulting risk of personal injury.
- Do not modify, re-configure or in any other way alter the base unit, toolhead or hose, or other parts that are included in the equipment.
- Repairs and service may only be performed by Pressmaster Tool or by a service workshop or agent duly authorized by Pressmaster Tool
- Keep the equipment dry. Do not use it in wet or damp areas or close to flammable fluids or gases.
- Keep the equipment in a dry place, inaccessible to unauthorized persons, when not in use.
- Do not allow unauthorized persons to touch the equipment. Keep unauthorized persons away from the working area.
- If the equipment is used outdoors, the necessary extension cord must be approved for outdoor use.
- Wear a hairnet if your hair is long. Do not wear loose fitting clothes which can get caught in moving parts.
- Always keep the workplace and the equipment clean. Untidy conditions or dirty equipment can give rise to accidents.

### Safety rules, base unit and tool

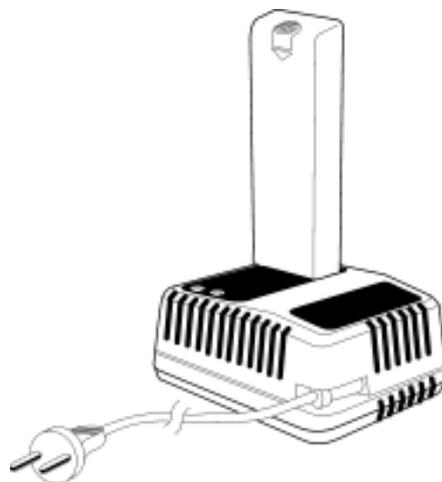
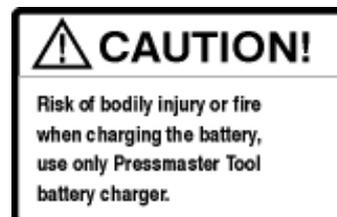
- Do not subject the base unit and tool to unnecessary force, shocks or impact.
- Check before use that the hose and cord are correctly connected and that the hose pack is undamaged.
- Check that the carrying strap is firmly attached.
- Never pull the tool head and/or hose so that the base unit moves. This may damage the hoses, cable or connections.
- Do not strain the base unit or tool head. Observe the instructions given in the section entitled "Using the equipment".
- Ensure that the cover is closed, this protects the hose, fittings and electrical connection.
- Ensure that the rubber protection covering the tool head is intact and firmly in place.

**Contd. Safety rules, base unit and tool**

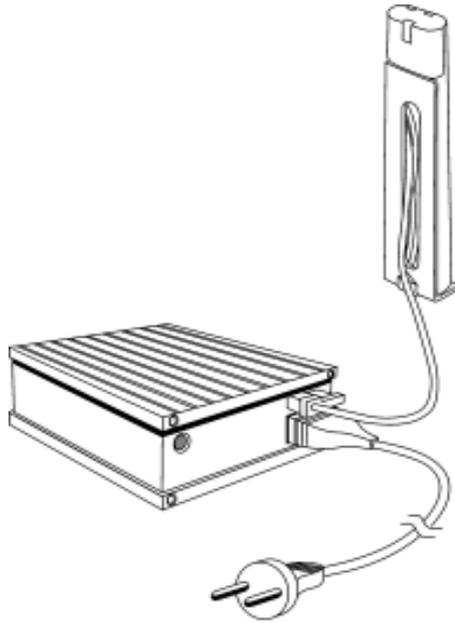
- Check each time before use that all parts are intact and fully operational for their intended purpose. Check all electric and hydraulic connections, ensure that the tool head can swivel as intended, that the crimping dies are intact and positioned properly, and that switches and control buttons/levers are intact. Damaged parts should be repaired or replaced by authorized service personnel.
- Do not use the base unit unless the tool head assembly is properly attached. Never start the base unit without a tool head assembly attached.
- Do not use the control lever to hang up the tool head.
- Unplug the main power supply when the equipment is not in use. If powered by battery, the battery should be removed and placed in the battery charger when not being used.
- Turn the switch to the OFF mode and unplug the main power supply or disconnect the battery before changing the die sets.
- Check the equipment in accordance with section entitled Maintenance, and clean the tool, base unit and other parts regularly. Inspect the hose and cords and ensure that the equipment is given the proper service if replacement or repair is required.
- Never point the tool at anyone.
- Only use those die sets manufactured and supplied by Pressmaster Tool.

**Safety rules, battery charger and battery**

- Ensure that the mains power supply corresponds to the data on the type sign of the battery charger.
- Check the power cord and its connectors each time before use.
- Allow a qualified serviceman to replace or repair any damaged parts.
- Keep the opening of the charger free from foreign objects and protect it against dirt.
- Never insert the AC/DC battery adapter into the charging opening.
- The charger is intended only for the charging of genuine BP 1400 batteries at a rated voltage of 12 V. Never charge batteries of a different make. Always use genuine Pressmaster Tool accessories.
- Protect the battery charger against moisture. The charger may only be used in a dry environment. The charger is capable of being mounted to a vertical wall.
- Never open the battery enclosure. Protect it against impact, heat, wetness and fire to eliminate the risk of explosion.
- Cover the battery contacts when storing outside the battery charger or the base unit to prevent the risk of fire and short circuiting.
- Ensure that the battery contact plates are always clean.
- Never dispose of expended batteries in household refuse, in fire or in water.  
Return expended batteries to Pressmaster Tool Service.



Battery charger with battery



AC/DC converter with battery adapter

**Safety rules, AC/DC converter and battery adapter**

- Before plugging in, check that the supply voltage is correct and that it corresponds to the data on the AC/DC converter.
- Check the power cord and its plug every time before use. Also regularly check the cord between the AC/DC converter and battery adapter to detect any damage.
- Ensure that all connectors are firmly plugged in.
- Only a Pressmaster Tool authorized serviceman should replace or repair any damaged parts.
- Regularly clean the contacts of the AC/DC converter and battery adapter.
- Protect the AC/DC converter against moisture, blows and impact. The converter may only be used in a dry environment.
- Unplug the mains power supply after use and before plugging the battery adapter in or out.

## Functional description

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The base unit contains a microprocessor controlled electro hydraulic pump. The system is powered by a rechargeable NiCd battery or an AC/DC convertor.

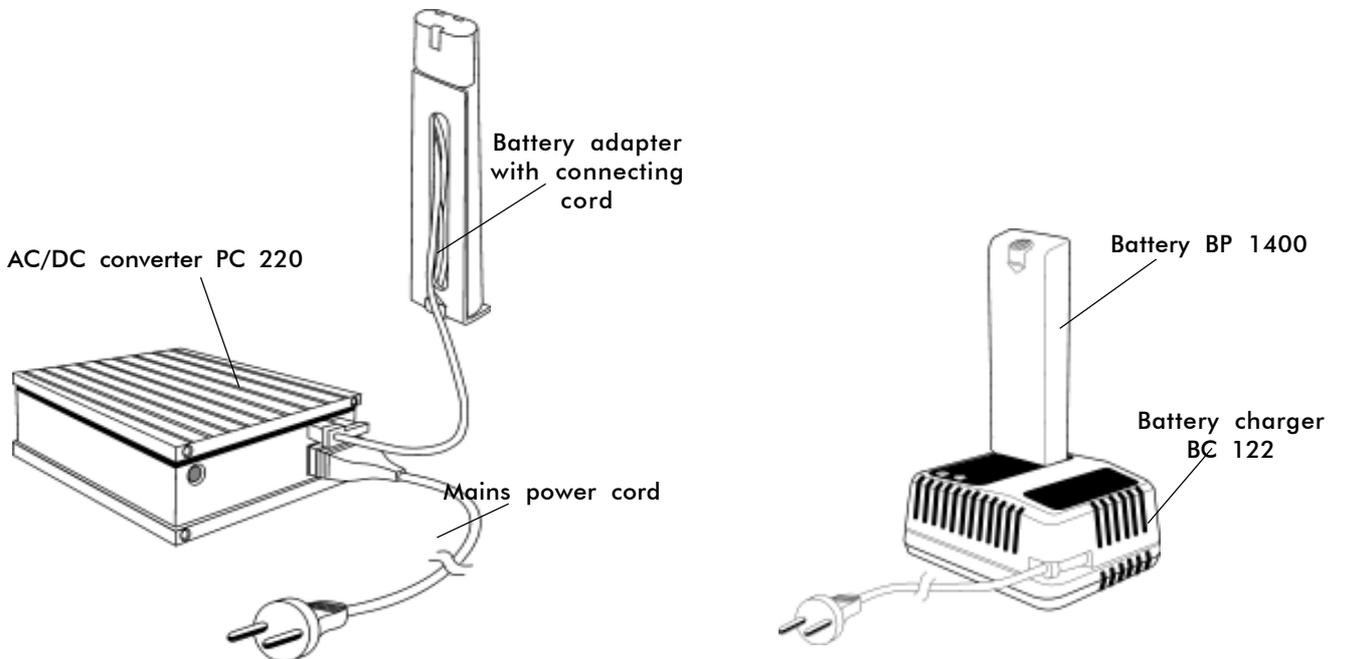
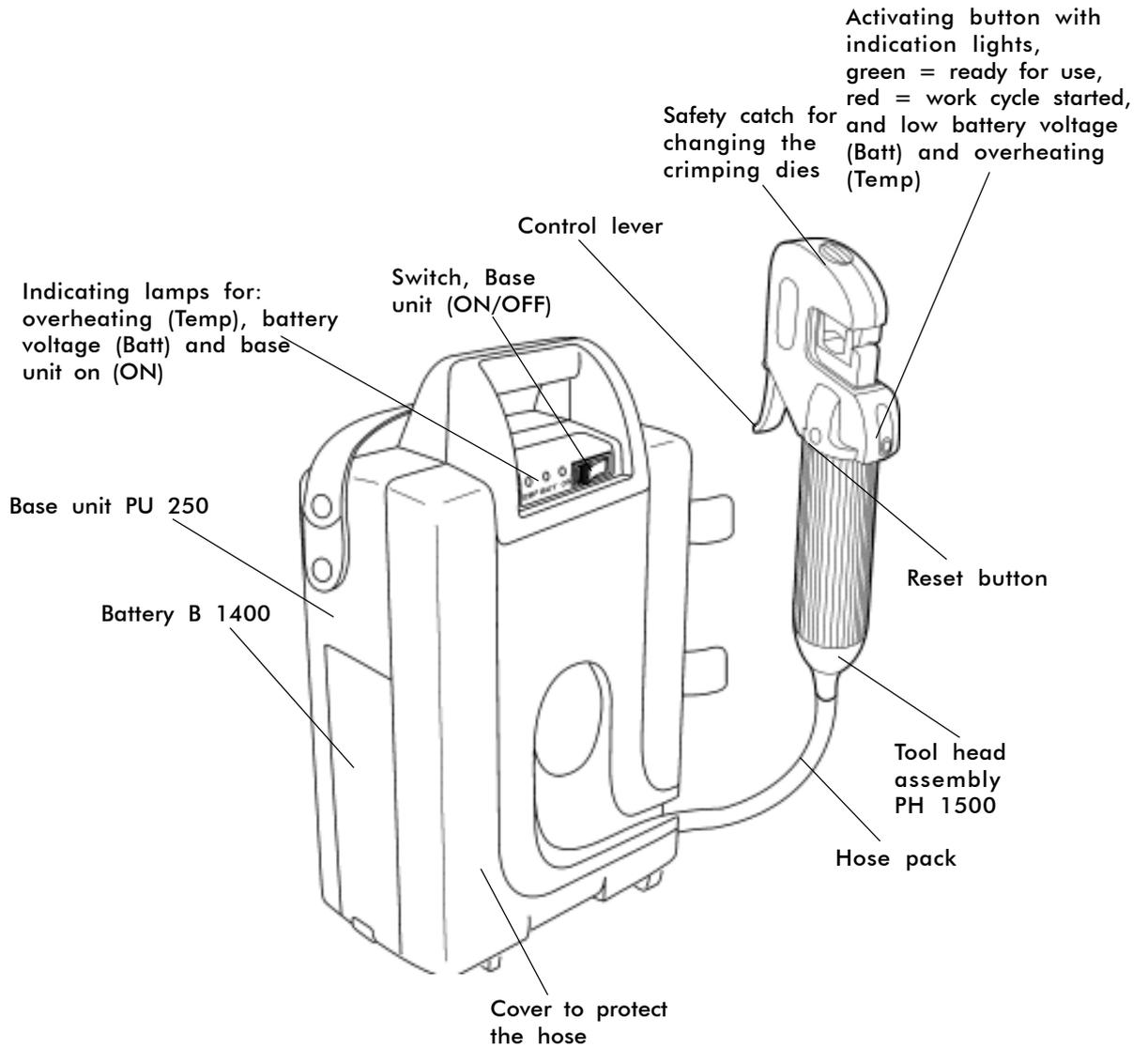
A charged battery must be installed and the tool head assembly must be connected to the base unit before starting the system. At startup, the hydraulic pump will operate for 3-4 seconds to charge the hydraulic system, at which time the system is ready for use.

The dies are normally closed for safety reasons. The dies are opened (retracted) with the control lever in order to insert the connector to be crimped. Power is disabled to the base unit whenever the control lever is depressed, so the crimp cycle cannot be started while inserting the connector into the dies. After the connector is inserted into the dies and the control lever is released, the crimp cycle can be completed by depressing and holding the activating button. Upon completion, the dies can be retracted with the control lever, and the crimped connector can be removed. The hydraulic pump will continue to operate during this time to recharge the hydraulic system in preparation for the next crimp cycle. The crimp cycle can be stopped at any time by releasing the activating button. The crimp cycle can be run to completion by depressing and holding the activating button. It can be aborted by depressing the reset button on the tool head assembly.

The system features interchangeable die sets that can be quickly and easily exchanged when different connectors are to be crimped. Power is automatically disabled to the base unit while exchanging the dies for safety reasons.

The microprocessor continuously monitors the status of the system temperature and condition of the hydraulic circuit, and the battery voltage. The battery saving function automatically shuts down the system if it has not been used for ten minutes.

### System PH 1500, component parts



## Inserting and removing the battery

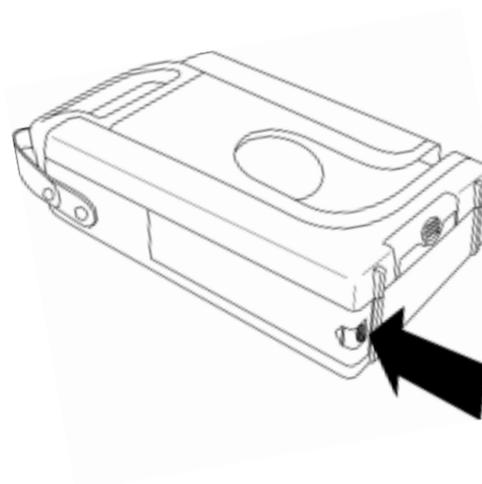
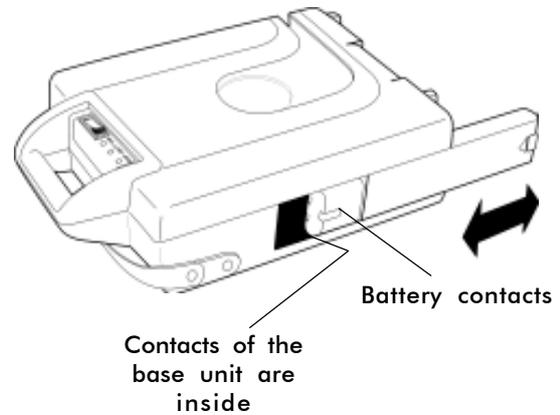
### Important concerning safety

- **Study the complete safety instructions before proceeding.**
- Ensure that the battery is of the genuine original make and that it is intact and clean.
- Ensure that the base unit is switched OFF and that the tool head assembly is properly connected.
- Lower the base unit on its back (as shown) and insert the battery by putting it in the groove in the base unit as illustrated.
- Slide the battery in and release so that it hooks in the position intended.

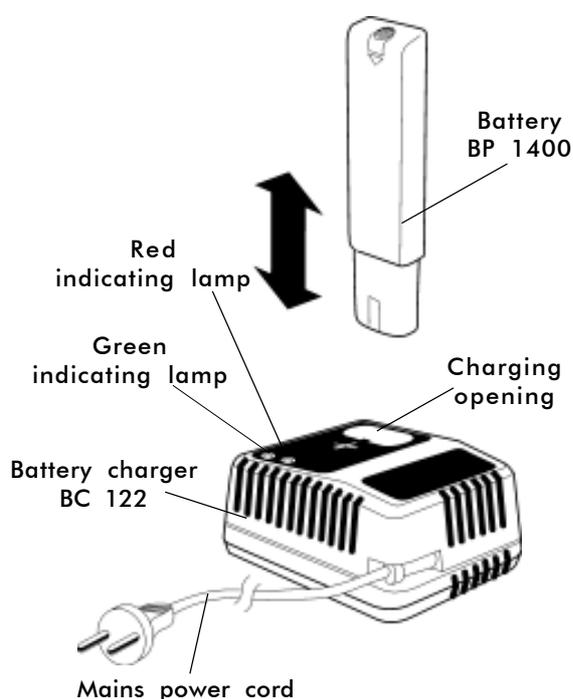
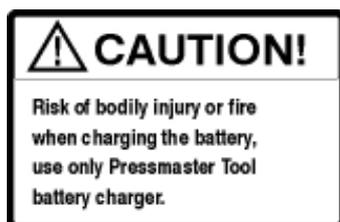
### After use:

- Remove the battery in the reverse order, ie, push the bottom of the battery inwards then outwards to release it.
- Then pull the battery straight back until it can be lifted from the groove in the base unit.

The battery, battery adapter, battery compartment of the base unit, and the battery charger are provided with grooves to ensure correct polarity alignment. Observe the polarity when inserting the battery and never use force when inserting or removing the battery.



Inserting and removing the battery



Battery charging. Ensure that the groove in the battery corresponds with the opening in the charger.

## Charging the battery

Charging commences when the battery is inserted into the charging opening and the charger is connected to the main power supply. The charging process and error functions are indicated by the green lamp and the red lamp.

The BC 122 charges the battery with the optimum rapid charging current, depending on temperature and voltage. This results in a shorter charging time and a long battery service life.

The maximum charging current flows when the temperature of the battery is between 0½C and 45½C. The charging time is approx. 15 minutes.

Trickle charging compensates for the natural self-discharging of the battery and will keep it fully charged without any damage if it is kept in a charger that is plugged into the main power supply.

### Function of indicating lamps when charging

- **Steady green light.**  
Battery not inserted, main power supply ON.
- **Flashing green light.**  
Quick charging until the battery becomes fully charged. The charger will then switch automatically to trickle charging.
- **Steady green light.**  
Battery inserted, trickle charging in progress because the battery is fully charged.
- **Steady red light.**  
CAUTION! The battery is inserted, trickle charging is in progress because the battery is too warm (or too cold). The mode will automatically change to quick charging when the temperature returns to an appropriate level.
- **Flashing red light.**  
CAUTION! The battery is defective or the charging contacts are dirty. Charging is no longer possible.

## Mains power

### Important concerning safety

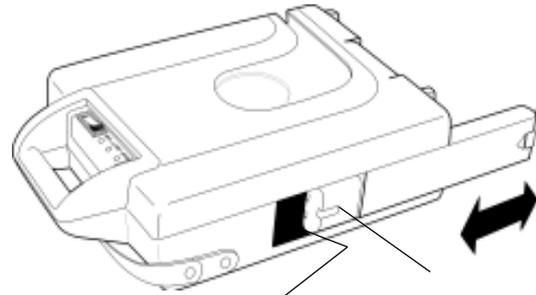
- Study the complete safety instructions before proceeding.

### Connecting the AC/DC converter

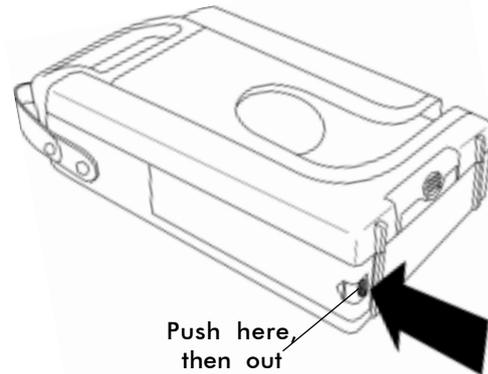
- Ensure that voltage of the main power supply corresponds with the data plate on the AC/DC converter.
- Ensure that the battery adapter, AC/DC converter and cords are intact and clean.
- Do not plug the AC/DC converter into the main power supply until the battery adapter is firmly fitted.
- Ensure that the base unit is switched OFF and that the hose pack/tool are properly connected.
- Lower the base unit and insert the battery adapter by putting it in the grooves in the base unit as illustrated.
- Slide the battery adapter in until it hooks securely in the fully seated position.
- Connect the battery adapter cord to the upper socket on the AC/DC converter.
- Connect the main power cord, first to the lower socket on the AC/DC converter and then to the main power supply. The lamp on the AC/DC converter will light and the equipment is ready.

### After use:

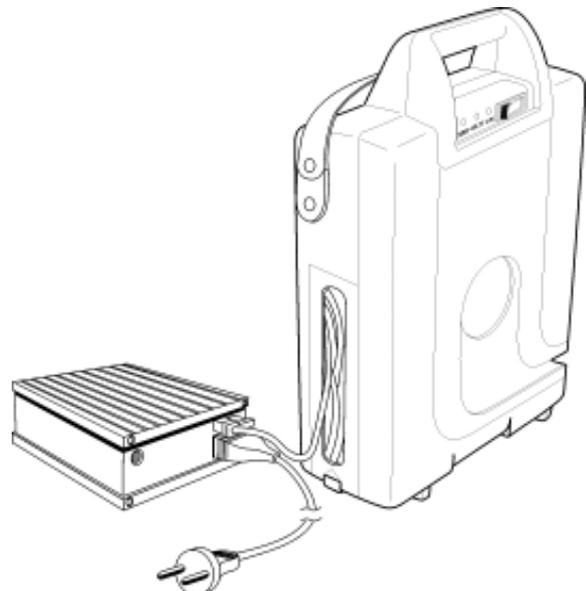
- Unplug the main power cord to the power supply.



Contacts of the base unit are inside



Inserting and removing the battery/battery

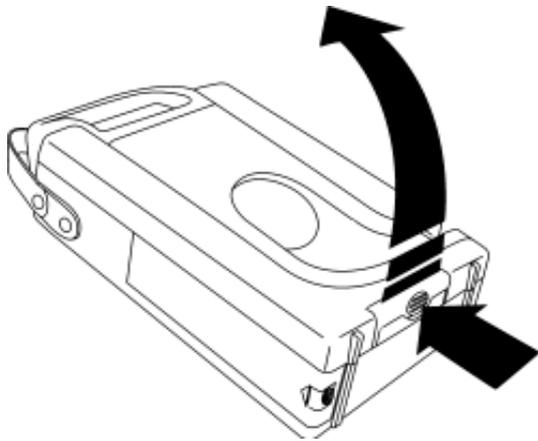


Connecting the AC/DC converter

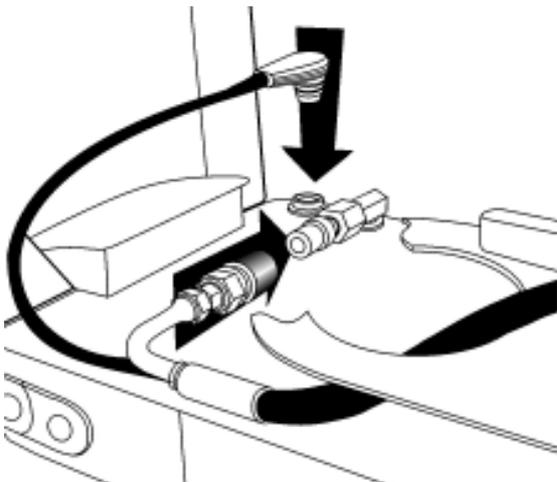
## Connecting the tool head assembly

### Important concerning safety

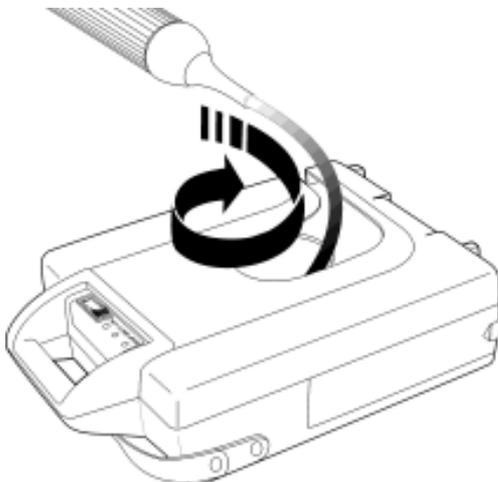
- Study the complete safety instructions before proceeding.
- Remove the power source (battery or AC/DC converter) from the base unit.
- Lower the base unit on its back and open the cover.
- Insert the hose and electrical couplings through the aperture in the supporting bracket and align. To plug in the electric connector, first ensure you properly align the male/female key on the cord set. Push the connector on and then screw the sleeve firmly to the socket. Push the quick-connector of the hydraulic hose firmly onto the male fitting of the base unit. Pull back the sleeve of the quick-connector to disconnect it.
- Put the tool and hose assembly through the hole in the cover, and close the cover.
- Wind the hose pack down inside the protective plate and firmly position the tool in the holder on the side of the base unit.
- Reconnect the power source to the base unit.
- The equipment is now ready for use.



Opening button for the cover



Connecting the electric and hydraulic power



Wind the hose pack down underneath the protective plate and cover



### IMPORTANT!

In the event of an external hydraulic oil leak, dispose of used hydraulic oil properly and in accordance with applicable federal, state, and local laws, regulations and ordinances.

## Indicating lamps and controls

### On base unit

#### **Batt** (Battery voltage)

Shows steady red light when battery voltage is low, the unit has a few work cycles remaining. The unit will temporarily disable itself between cycles. Pressing the reset button between cycles will allow you to continue until the battery is completely discharged.

A proper crimp will be performed each time this is done, however replace a discharged battery as soon as possible.

#### **Temp** (Temperature)

Shows steady red light if temperature of hydraulic fluid exceeds 60½C. The base unit must then be switched off and allowed to cool down before being used again. This will take 15-30 minutes.

#### **ON** (Base unit ON/OFF)

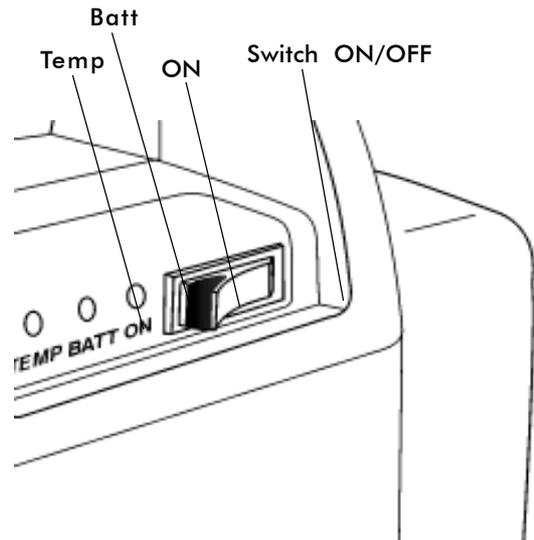
Shows steady green light when the base unit is on. The lamp starts flashing if the equipment is not used during a period of about 10 minutes, ie, battery economy mode.

The equipment is started again by pressing the Reset button. Alternatively turn power switch off, wait a few seconds and turn power switch on again.

#### **Power switch** (Base unit ON/OFF)

Toggle switch with two positions, ie, ON and OFF.

Can be used to restart the unit from battery economy mode.



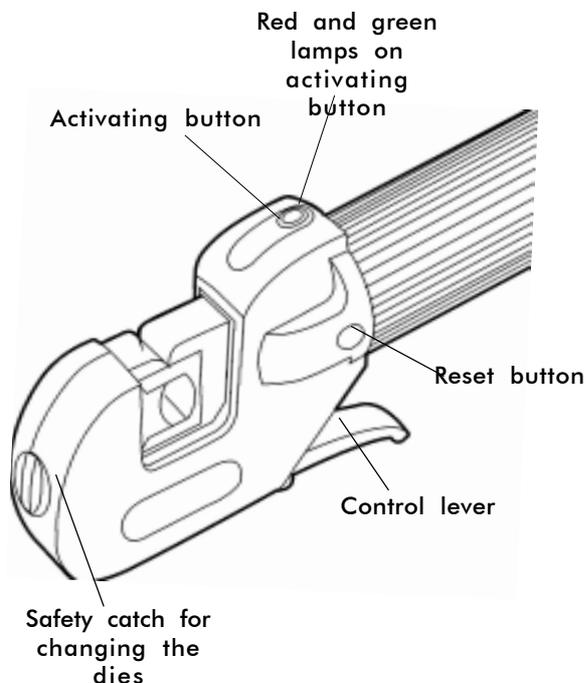
Lamps and switch on the base unit

Contd. indicating lamps and controls

On tool head

**Safety catch** (When changing the dies)

Must be turned 90½ clockwise while holding the control lever pressed in, to enable the dies to be changed.



**Red lamp** (Several functions)

Lights as the work cycle starts. While this lamp lights, the work cycle can be stopped temporarily if desired by releasing the activating button. The work cycle can be permanently stopped by pressing the Reset button after releasing the activating button.

The red lamp flashes in the event of low battery voltage (Batt), overheating (Temp) or hydraulic system time out.

**Green lamp** (Several functions)

Lights when hydraulic pressure is sufficiently high and the tool can be used. This lamp goes out when the battery economy mode is adopted. The green lamp flashes in the event of hydraulic system time out.

**Reset button**

The base unit can be started again by pressing the Reset button if the unit is in the battery economy mode. An ongoing work cycle can be permanently stopped by pressing the Reset button after releasing the activating button.

**Activating button**

Starts the work cycle, red lamp lights, and the work cycle will be completed if the activating button is kept pressed in.

**Control lever**

Press the control lever in to open the dies to insert a new terminal or to remove a crimped terminal.

Power supply to the hydraulic valve system is cut off while the control lever is pressed in, it must therefore be fully released before a work cycle can be performed.

Lamps and controls on the tool

**Summary indicating lamps**

S = Steady F = Flash

	Base unit			Tool head	
	Temp (red)	Batt (red)	ON (green)	Red	Green
Overheat	S		S	F	
Low battery		S	S	F	
System time out			S	F	F
Ready			S		S
Crimp			S	S	
Battery saving mode			F		
Service	S	S	S	S	S
Data fault			S	S	S

## Installing the die set

### Important concerning safety

- Study the complete safety instructions before proceeding.

Before installing turn OFF the switch on the base unit and disconnect the battery or battery adapter.

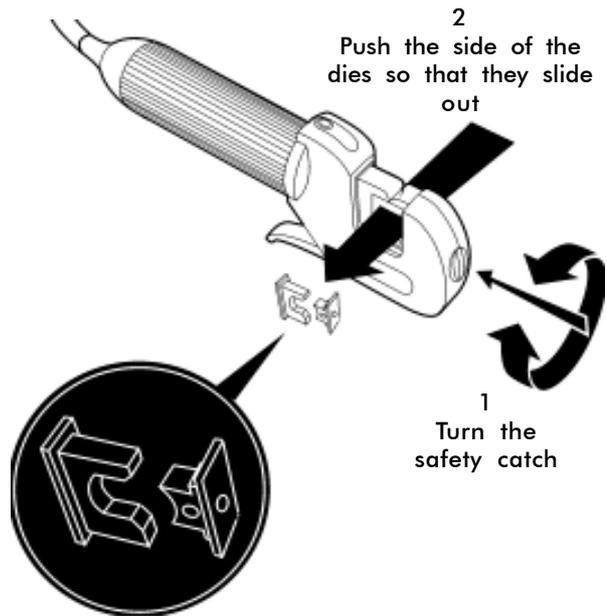
- Press the control lever and keep it pressed in.
- Turn the safety catch on the tool 90½ clockwise to unlock the die set.

If there are dies in the tool:

- Push the side of the dies so that they slide out, and take them out.

Ensure that the dies are aligned before inserting.

- Press the control lever on the tool and keep it pressed in.
- Insert the aligned dies, turn the safety catch 90½ counter clockwise, release the control lever and ensure that the dies are locked sideways.



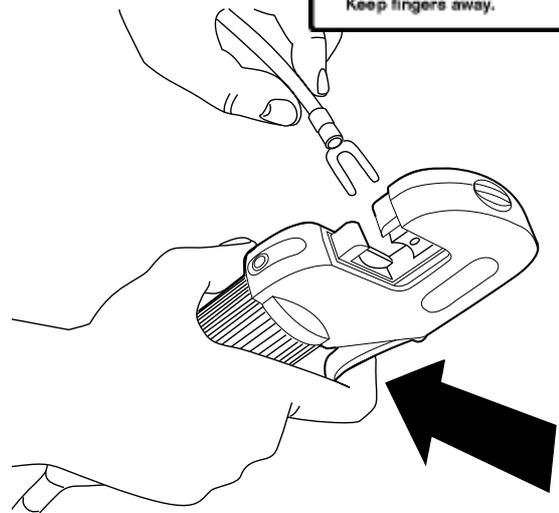
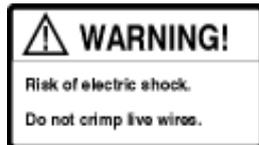
**Changing the tool dies**  
Ensure that the tool dies are aligned before fitting. Never use force when inserting or



## Using the equipment

Before using the equipment, make a functional check in accordance with the instructions in section, Functional Checks. Check also that the equipment is intact and undamaged and that everything is properly connected in compliance with instructions, eg, in section Safety Rules.

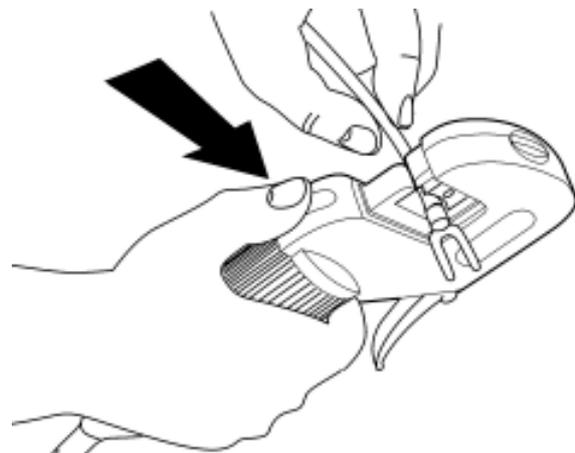
- Start the base unit. The equipment is ready to use when the green lamp on the tool head lights.
- Press the control lever and keep it pressed in.
- Insert the terminal to be crimped into the dies of the tool.
- Release the control lever and the dies will partially align the terminal.
- Press the activating button, the work cycle starts and the red lamp lights.
- If everything looks alright, keep the activating button pressed in until the work cycle is completed whereafter the red lamp goes out.
- When the work cycle is completed, press the control lever and take the terminal assembly out.



**Press the control lever and position the termi-**

The work cycle can be interrupted by releasing the activating button if the terminal is not aligned, or in the case of any other problem.

- Press the Reset button if you wish to fully stop an ongoing work cycle and return the dies to their initial position. Press the control lever to take out the terminal.



**Activating button pressed in, work cycle in**

## Functional checks

Check regularly as follows to ensure that the tool is working as it should:

### Checking the control lever

- Press the control lever a few times and ensure that it moves fully back to its initial position without binding.

### Checking the dies

- Press the control lever a few times and ensure that the die holder move easily and open correctly.
- If the die holder stays in the open position even when the control lever is fully released the tool head is damaged and should be sent to an authorized Pressmaster Tool Service center for repair.
- Ensure that the dies are locked in position by the safety catch.
- Check that the dies are free from cracks or other damage.

### Checking the safety switch

Normal functioning: When the control lever is pressed in it will not be possible to start a work cycle by mistakenly pressing the activating button. This is done to prevent injuring the operator's fingers while inserting a terminal to be crimped.

- Start the base unit and press the control lever.
- Press the activating button. If a work cycle starts then the safety switch is faulty and the equipment should be sent to an authorized Pressmaster Tool Service center for repair.



## Maintenance

### General

- The best maintenance is to keep the base unit and the tool head clean and intact. Use care during transportation and when working with the unit.
- If the equipment is exposed to water, it must be wiped dry and a film of anti-rust oil should be applied to the tool head assembly.
- Check the hose pack regularly with regard to wear and damage and send the equipment for service/repairs if any type of defect is observed.
- Regularly clean the contacts of the battery, battery adapter and battery pocket in the base unit. Use a clean cloth soaked with isopropanol or similar cleaning fluid.
- Regularly check that the rubber tool grip and rubber protection is intact and properly fitted. Send the tool for service/repair when necessary.
- Carefully follow the instructions in section, Safety Rules.

### Service intervals

The equipment contains an electronic unit that among other features counts the number of work cycles. The "Temp", "Batt", "ON" and the red LED on the tool head will show steady light when the tool head assembly and hose has completed 50 000 work cycles.

When this occurs, contact an authorized Pressmaster Tool service center. Addresses and telephone numbers are noted in the Introduction.

## Trouble shooting

### Important concerning safety

- **Study the complete safety instructions before proceeding.**

The following hints may help you to solve the problem in the event of malfunctioning equipment. If the action suggested does not help, hand the equipment over for inspection to an authorized service workshop.

Fault	Probable cause	Indication	Action
Tool not working.	Battery incorrectly fitted.	---	See, Inserting and removing the battery.
	Battery needs charging.	"Batt" lamp shows steady red light. LED on tool head flashes red.	See, Charging the battery.
	Base unit is in battery economy mode.	Base unit switch in ON mode, ON-lamp flashes green.	Press the Reset button.
	Tool is overheated.	"Temp" lamp shows steady red light. LED on tool head flashes red.	Allow the tool to rest 15-30 minutes.
	Hose pack not connected to base unit.	---	See, Connecting the tool.
	AC/DC converter not fitted, or incorrectly connected to mains supply.	---	See, Main power.
	Battery adapter not connected, or incorrectly fitted.	---	See, Main power.

Contd. trouble shooting

Fault	Probable cause	Indication	Action
Contd. tool not working.	Fault with internal electronics or hydraulic system of tool.	---	Send the equipment to an authorized workshop.
	Hydraulic system time out error.	Red and green lamp on the tool head flashes.	Send the equipment to an authorized workshop.
	Internal data flow fault.	Red and green lamp on the tool head shows steady light.	Send the equipment to an authorized workshop.
	The tool has reached its limit for the next service (50 000 work cycles).	"Batt", "Temp", "ON" and the red and green LED on the tool head shows steady light.	Send the equipment to an authorized workshop.
Tool starts but work cycle is unusually long.	Air in the hydraulic system.	---	Send the equipment to an authorized workshop.
	Internal leakage in hydraulic system.	---	Send the equipment to an authorized workshop.
Oil leaking from tool or base unit.	Faulty component or seal.	---	Send the equipment to an authorized workshop.

## Technical data

### Base unit PU 250

Working pressure .....	25.0 MPa (3625 Psi)
Minimum rate of flow .....	0.375 litre/min (229 cu in/min)
Hydraulic fluid, grade/quantity .....	Statoil 131/0.2 dm <sup>3</sup> (122 cu in)
Power supply .....	Battery NiCd 12 V DC or AC/DC convertor 220 V 50 Hz
Work cycle .....	1 - 3 seconds
Expected service period .....	250 000 work cycles
Weight, inc. battery, without tool/hose pack .....	5.0 kg
Length x width x depth .....	350 x 185 x 130 mm
Temperature range .....	-20 – +50 ½C
Sound level .....	lower than 70 dB(A)

### Tool head assembly PH 1500

Press force .....	15 kN
Length of stroke .....	15 mm
Weight, tool only .....	0.75 kg
Diameter of handle .....	41 mm
Length of handle .....	225 mm
Expected service period .....	50 000 work cycles
Length of hose pack .....	2200 mm
Weight of hose pack, inc. quick-connector .....	0.85 kg
Working pressure of hydraulic hose .....	37.5 MPa
Min. bursting pressure of hydraulic hose .....	150.0 MPa
Hand/arm weighted vibration .....	lower than 2.5 m/s <sup>2</sup>

### Battery BP 1400

Type .....	NiCd 12 V, rechargeable
Capacity .....	1.4 mAh
Overheating protection .....	NTC
Recharging time .....	0.2 - 1 hour
Number of recharges .....	1000
Weight .....	0.6 kg
Length x width x depth .....	240 x 55 x 30 mm

### Battery charger BC 122

Accumulator voltage (NTC) .....	4.8 V - 12 V
Mains voltage .....	230 V
Charging current, max. .....	5.8 A
Trickle charging .....	100 mA
Safety Class .....	II

### AC/DC converter PC 220

Primary voltage .....	230 V 50 Hz
Nominal output voltage .....	12 V DC
Max. idling voltage .....	17 V
Primary connector .....	mains power cord 1.5 m
Secondary connector .....	2 m, 12 V, 2.5 mm <sup>2</sup> cord with battery adapter
Electrical approval .....	VDE, N, S, D, PI.KEMA. CE marked
Weight .....	2.7 kg
Length x width x depth .....	131 x 75 x 175 mm