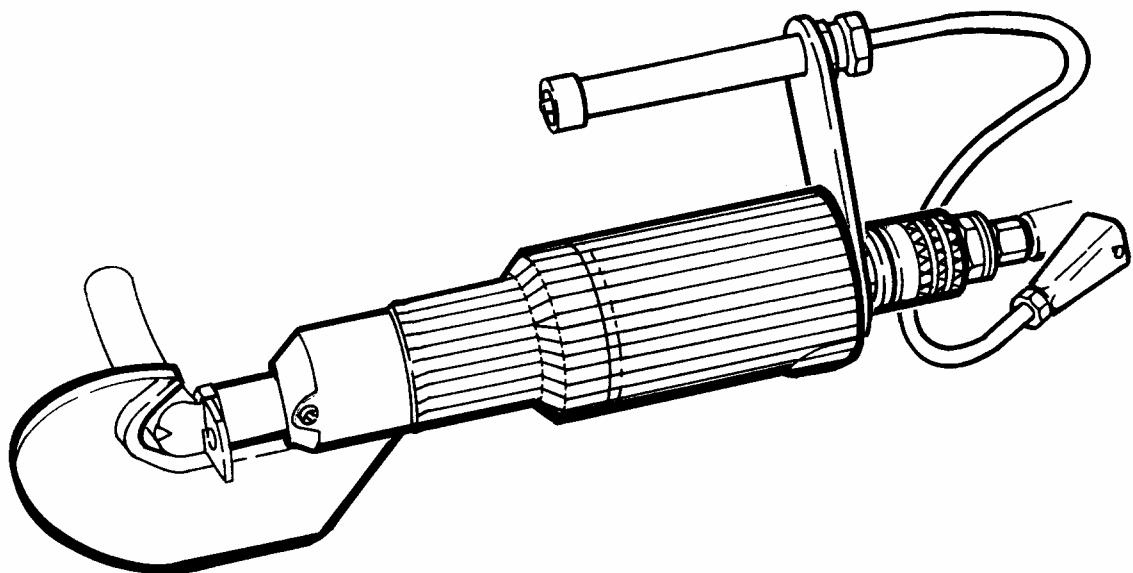


**Operating Instructions  
for  
*novopress*  
CRIMPING TOOL  
HP 95**



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DE	<b>EG-Konformitätserklärung - Original</b> entsprechend EG-Richtlinien 2006/42/EG Hiermit erklären wir, dass der <b>Verpresszylinder HP95</b> aufgrund der Konzipierung und Bauart sowie der von uns in Verkehr gebrachten Ausführung den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen entspricht. Bei einer nicht bestimmungsgemäßen Anwendung des Produkts oder bei einer nicht mit uns abgestimmten Änderung des Produkts verliert diese Erklärung ihre Gültigkeit. Die Konformitätserklärung ist nur gültig, wenn das Produkt mit dem Hydraulikaggregat HA1ES oder HA3 betrieben wird. Angewandte Normen: EN ISO 14121-1; EN ISO 12100-1; EN ISO 12100-2
EN	<b>EU conformity declaration - Translation</b> In accordance with EU directives 2006/42/EU We hereby declare that the <b>crimping tool HP95</b> and the version sold by us conforms with the relevant, fundamental health and safety requirements in terms of its design and construction. If the product is not used in accordance with proper use, or in the event of any modification to the product without our consent, this declaration shall become null and void. This declaration of conformity shall only be valid if the product is operated with hydraulic unit HA1ES or HA3. Applicable standards EN ISO 14121-1, EN ISO 12100-1, EN ISO12100-2
FR	<b>Déclaration de conformité CE - Traduction</b> conformément aux directives CE 2006/42/CE nous déclarons par la présente que <b>cylindre à presser HP95</b> de par leur conception et sa construction et dans la version que nous avons commercialisée, est en conformité avec les exigences fondamentales en vigueur en matière de sécurité et de santé. La présente déclaration perd sa validité en cas d'utilisation non conforme du produit ou d'une modification apportée au produit à laquelle nous n'avons pas consentie. La déclaration de conformité n'est valable que si le produit est utilisée avec le groupe hydraulique HA1ES ou HA3. Normes utilisées : EN ISO 14121-1, EN ISO 12100-1, EN ISO 12100-2
ES	<b>Declaración de conformidad CE - Traducción</b> Según las Directivas 2006/42/CE Por la presente declaramos que la <b>presa hidráulica de terminales HP95</b> en base a la concepción y tipo de construcción así como de la versión por nosotros comercializada se corresponde con los vigentes requerimientos básicos de seguridad y salud. Esta declaración pierde su validez en caso de una utilización no conforme a lo prescrito del producto o en caso de una modificación del producto no acordada con nosotros. Para que esta declaración de conformidad tenga validez, el producto se habrá de operar categóricamente con un grupo hidráulico tipo HA1ES o tipo HA3. Normas aplicadas: EN EN ISO 14121-1, EN ISO 21100-1, EN ISO 12100-2

NL	<b>EG-conformiteitsverklaring - Vertaling</b> conform EG-richtlijnen 2006/42/EG Hiermee verklaren wij dat de <b>perscilinder HP95</b> op basis van het ontwerp en de constructie, alsmede de door ons op de markt gebrachte uitvoering voldoet aan de van toepassing zijnde, elementaire veiligheids- en gezondheidseisen. Bij onjuist gebruik van het product of bij een verandering aan de het product die niet met ons is overlegd, verliest deze verklaring haar geldigheid. De conformiteitsverklaring is slechts geldig, indien de product met het hydraulische aggregaat HA1ES of HA3 wordt aangedreven. Toegepaste normen: EN ISO 14121-1, EN ISO 12100-1, EN ISO 12100-2
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07.07.2010

## **GENERAL SAFETY REGULATIONS**

### **Read all safety regulations and instructions!**

1. Keep the place of work clean.  
Disorderly work-places and work-benches invite accidents.  
Ensure that lighting is good.
2. Keep children away.  
Do not allow unauthorised persons to touch the device or the cable.  
Keep unauthorised persons away from your place of work.
3. Wear suitable working clothing.  
Do not wear any wide clothes nor jewellery - they may get caught up in moving parts.  
When working in the open it is recommended that you wear rubber gloves and non-slip footwear. Wear a hair- net if you have long hair.
4. Always be alert.  
Only use a device after having been instructed in its operation.  
Concentrate on your work. Proceed sensibly.  
Do not use the device when you are distracted.
5. Do not lean too far forward. Avoid abnormal stance.  
Make sure that you have a secure standing position, and maintain balance at all times.
6. Leave safety devices where they belong.
7. Hand tools may not be installed as fixtures.
8. Repair and maintenance.  
Have repairs and maintenance work carried out in an authorised NOVOPRESS specialist workshop.  
Only use original and identical NOVOPRESS spare parts.  
We reject all responsibility and liability for work carried out by third- party personnel.

## SAFETY INSTRUCTIONS FOR HYDRAULIC EQUIPMENT

1. Please read the operating instructions.  
Acquaint yourself with the hydraulic equipment.
2. Provide the equipment with the necessary care.  
Always keep the equipment in operational condition.  
Cleanness is an essential requirement for good and safe working.
3. Switch off the electric power supply to the hydraulic equipment,
  - when the equipment is not in use
  - when maintenance work is to be carried out.
4. Avoid unintentional switching - on.  
Keep hands and feet away from the switch when the equipment is not being used.
5. Do not use the equipment in a manner in contravention of the instructions.  
Never carry the equipment by the pipe or pull on the pipe.  
Protect the piping from heat, oil, sharp edges and high levels of weight strain.
6. Use only piping, fittings and accessories which have been designed for the operating pressure of the hydraulic unit.  
**BURSTING PRESSURE OR TEST PRESSURE IS NOT OPERATING PRESSURE!**  
Avoid squashing or bending of the piping.  
Piping must not be painted over.
7. Replace the hydraulic piping
  - when cracks, squashed or bent points are to be seen
  - when blistering is established
  - when hydraulic fluid escapes
  - when pipe fittings are damaged
  - when discolouration is established on the outer layer,  
e.g. due to the influence of solvents.
8. The hydraulic fluid used in the system is kerosene-based.  
This requires particular care and attention.
  - Avoid continuous contact with the skin
  - ensure that the hydraulic fluid does not get into the eyes or mouth.Hydraulic pipes have to be replaced after 5 years of usage, despite of the circumstance that no damages should be remarkable.
9. The equipment must not be operated, if it has leaks and there is a danger of hydraulic fluid coming into contact with persons, open fire, heating equipment, electric cabling, ground water, foods and other substances which are intended for human consumption.
10. Hydraulic units with petrol engines
  - must not be operated in closed rooms, due to the  
**DANGER OF INTOXICATION!**
  - do not pour in petrol while the motor is running or in the vicinity of open fire.  
**DANGER OF EXPLOSION!**

## HYDRAULIC CRIMPING TOOL HP 95, Order No.: 3000

### Operative Range

#### **WARNING!**

THE HP 95 IS A HAND TOOL AND SHOULD NOT BE USED AS A STATIONARY TOOL.

The HP 95 can crimp cable lugs and connectors for copper conductors with a cross-section ranging in size from 10 to 95 mm<sup>2</sup> (8 AWG to 4/0.)

### Minimum Quantity of the Pressing Operations:



Cross Section mm <sup>2</sup>	10	16	25	35	50	70	95
Min.Qty. of Pressings	1	1	1	1	1	1	1

The HP95 can be operated with the hydraulic unit HA 1-ES, Order No. 31070, or the foot pump HA 1-FS, Order No. 2900.

### Technical specifications

Diameter:	65	mm	(2.6")
Length:	350	mm	(13.8")
Weight:	3.0	kg	(6.6 lb)
Operating pressure (measured on hydr. unit)	min. 150	bar (2200 psi)	
	max. 160	bar (2346 psi)	
Power:	59.5	kN	(5.95 tonf)

### Operation

Crimping has three phases:

Phase 1 - quick idle stroke and supercharging

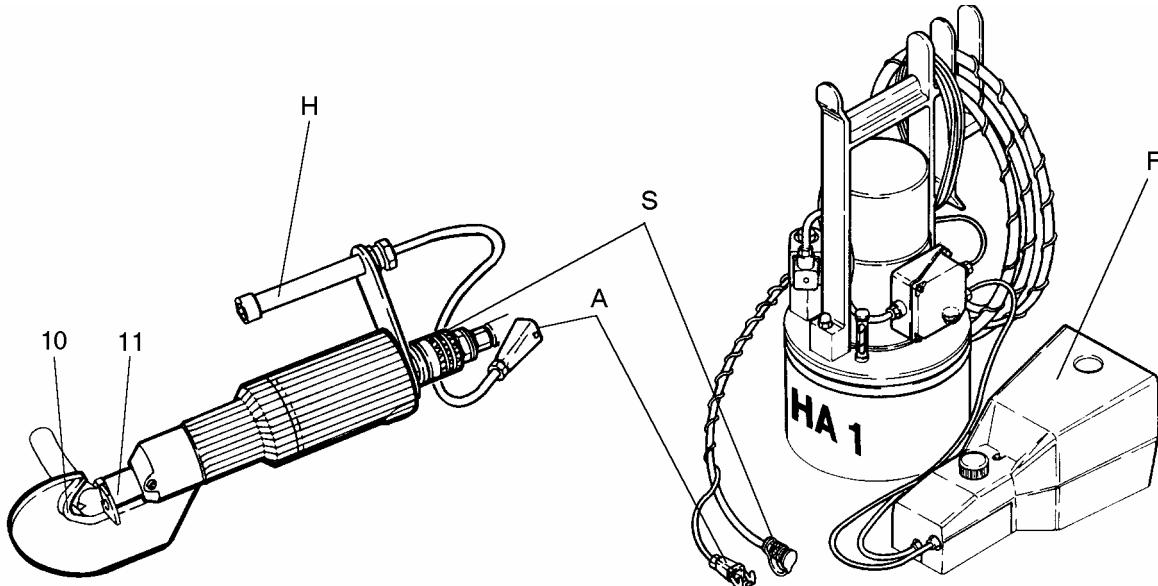
Phase 2 - slow crimping stroke

Phase 3 - hydraulic shut off after completion of crimping and the return stroke.

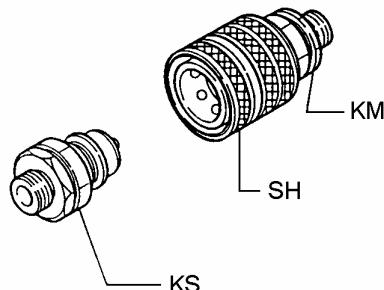
The three phases are carried out automatically.

The piston returns after the hand switch (H) has been released.

## Use



1. Connect the crimping tool to the HA 1 hydraulic unit by using the rapid-action coupling (S).
2. **Rapid-action coupling**



### Coupling

Hold the coupling sleeve (KM) on to the sliding sleeve (SH) and slide it on to the coupling plug (KS).

### De-coupling

Hold the coupling sleeve (KM) on to the sliding sleeve (SH) and pull away from the coupling plug (KS).

### **WARNING!**

While hydraulic unit is connected, keep fingers out of crimping area (area between upper (10) and lower tool (11)).

### **RISK OF INJURY!**

3. Connect the crimping tools to the hydraulic unit HA 1 using the connector (A).

#### **Note!**

*The HP 95 can only be operated with the hand switch (H). The foot switch (F) is used only for the EMERGENCY STOP function (see operating instructions HA 1 / HA 2).*

4. Carry out a few idle strokes to remove air from the system.  
The hydraulic unit should be on a higher level than the crimping tool during this operation
5. The hand switch (H) is a swivelling switch and can be locked into any desired position.  
Proceed as follows:
  - Slacken the set screw in the nut SW 36 (between hand switch (H) and coupling plug).
  - Tighten the nut SW 36.
  - Tighten the set screw.

## Crimping

Place the end of the cable with the terminal into the crimping head.

Then:

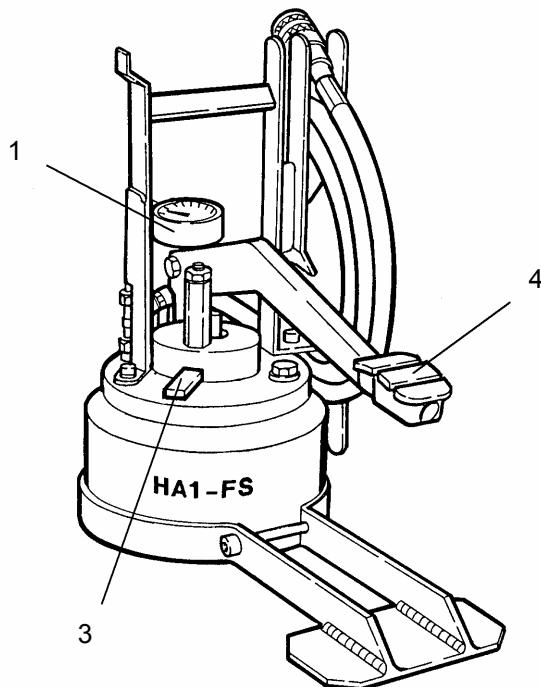
A: **HA1ES**

Press the hand switch (H) and keep pressed until the control valve shuts the machine off.  
Then release the hand switch (H).

**NOTE:**

*The piston must return completely before the next crimp is made.*

**OTHERWISE THE NEXT PRESSING WILL BE TOO DEEP!**



B: **HA1FS**

Operate the pressure lever (4) until the piston stroke stops and the gauge (1) constantly shows the maximum pressure.

By pressing the release lever (3) oil is released from the crimping cylinder.

**NOTE:**

*Keep the release lever pressed until the gauge shows Zero and the piston has returned to its original position.*

**OTHERWISE THE NEXT PRESSING WILL BE TOO DEEP!**

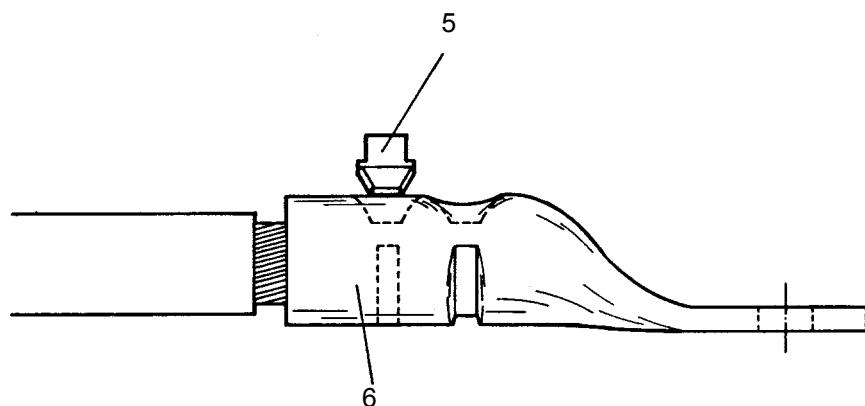
**NOTE!**

- Crimping should not be interrupted before the hydraulic valve has automatically shut off. Otherwise the crimp depth will not be sufficient.
- If more than one crimp is made in the same place, the cross-section will be too small.
- We can supply test pieces for checking the depth (Order No. 4103).
  
- Select the distance to the next pressing operations such that the tool is fully contacting a nondeformed area.

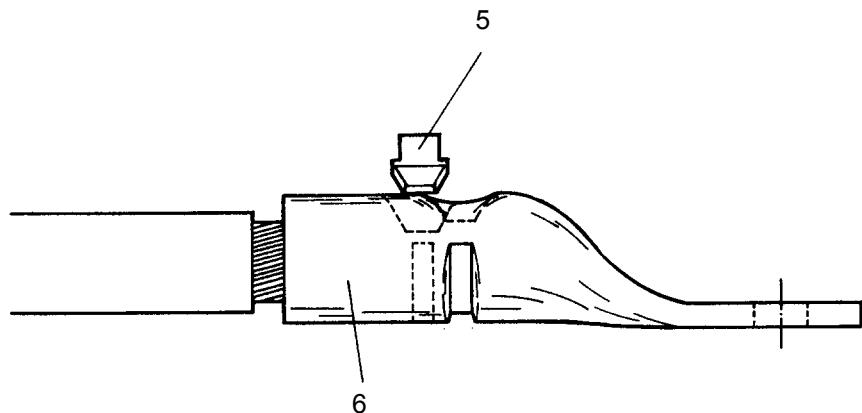
**Selected distance all right: identical pressing depth**

**Key:**

5 = Lower tool  
6 = Cable plug



**Too close a distance: pressed too deep**



## Maintenance

### **WARNING!**

UNCOUPLE HYDRAULIC UNIT OR DISCONNECT IT FROM THE MAINS  
BEFORE CARRYING OUT MAINTENANCE WORK!

If dirty:

Clean upper and lower tool.  
Clean entire crimping cylinder.

Every week:

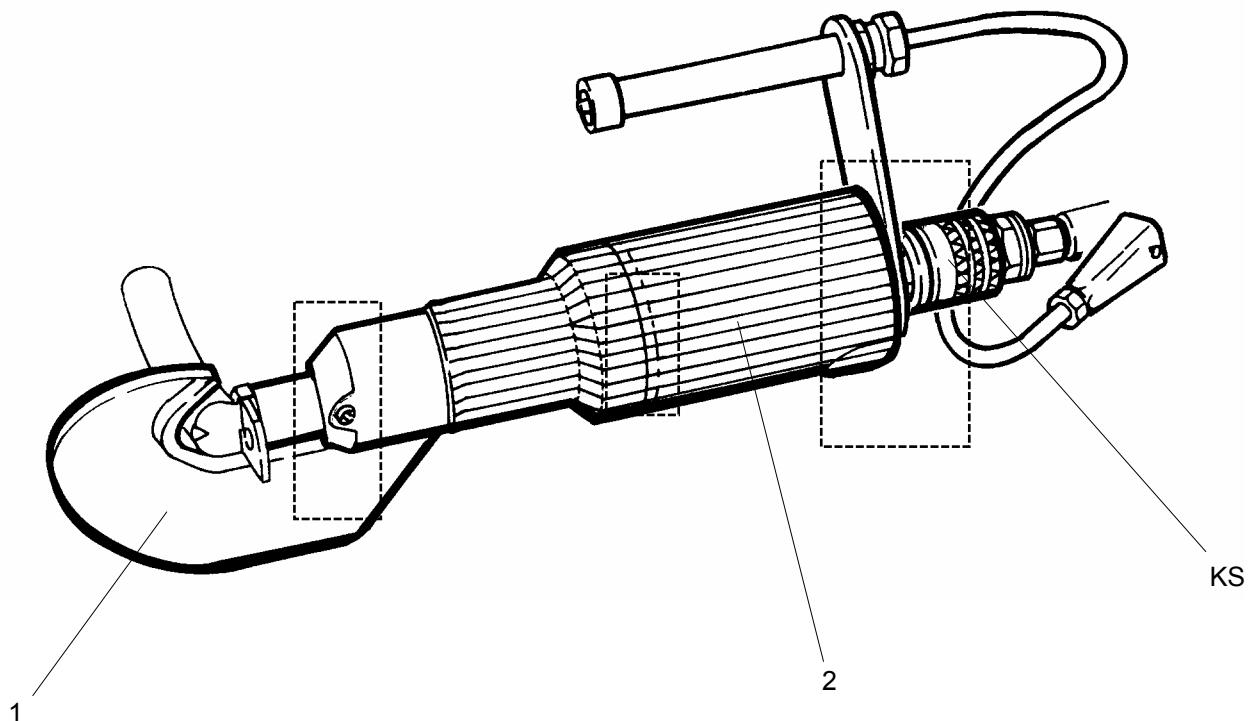
Check upper and lower tool for any damage. Replace, if necessary.

Every month:

Check marked areas for possible leakage and send in HP 95 for repair, if necessary.

Every 3 months:

Load crimping head (1) into a vise. Place 30mm wrench on coupling plug (KS) and fasten cylinder (2).



Repairs / Service

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