

Operating Instructions
for

novopress

CRIMPING TOOL

HP 95

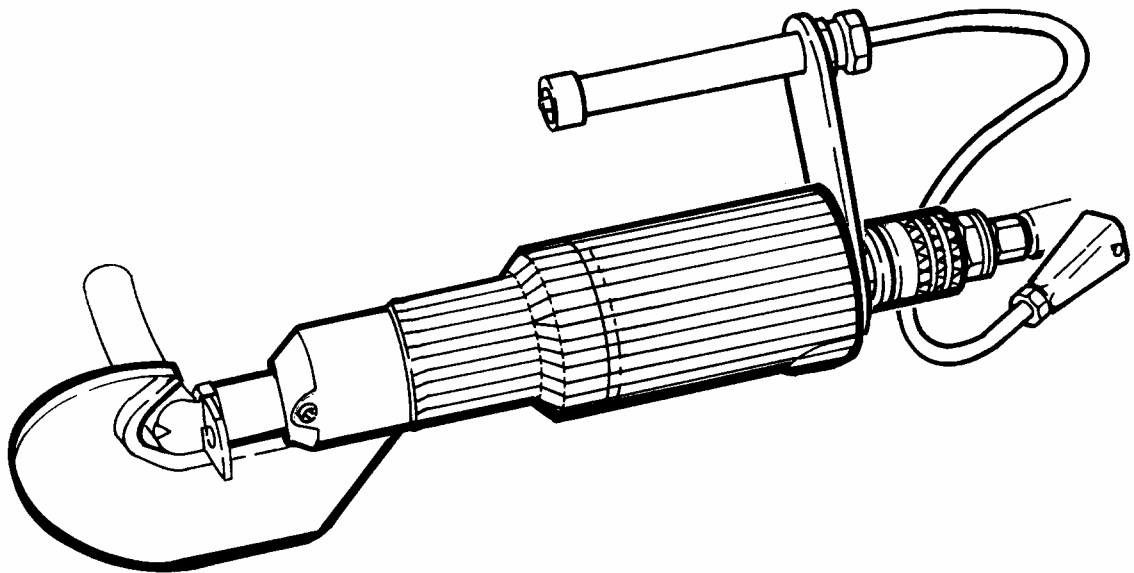


TABLE OF CONTENTS

CE Conformity Attestation
Safety Regulations
Operative Range 1
Technical Specifications 1
Operation 1
Use 2
Crimping 3
Maintenance 5

CE - KONFORMITÄTSERKLÄRUNG

entsprechend EG-Richtlinie
98/37/EG

Novopress GmbH & Co KG
Scharnhorststr. 1
D-41460 Neuss

Verpresszylinder
HP 95

Ser-nr:

1. EN 294, EN 349, EN ISO 12100-1, EN ISO 12100-2

Hiermit erklären wir, daß die nachfolgend bezeichnete Maschine aufgrund Ihrer Konzipierung und Bauart sowie der von uns in Verkehr gebrachten Ausführung den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen entspricht. Bei einer nicht bestimmungsgemäßen Anwendung der Maschine oder bei einer nicht mit uns abgestimmten Änderung der Maschine verliert diese Erklärung ihre Gültigkeit.

Die Konformitätserklärung ist nur gültig, wenn die Maschine mit dem Hydraulikaggregat HA1ES oder HA3 betrieben wird.

Angewandte harmonisierte Normen, insbesondere:
siehe Punkt 1

We hereby declare that with respect to its design and construction the machine stated below and the model thereof which we have brought into circulation conform with the applicable basic requirements on health and safety.

Any use of the machine other than that for which it is intended and any modification made thereto without our consent shall render this declaration null and void.

This declaration of conformity shall only be valid if the machine is operated with hydraulic unit HA1ES or HA3.

Applied harmonized standards, in particular:
see Item 1 above

Nous déclarons par la présente que par sa conception et son type ainsi que par l'exécution que nous avons mise sur le marché, la machine désignée ci-après répond aux exigences de sécurité et de prévention de la santé applicables.

La présente déclaration perd sa validité si la machine n'est pas utilisée conformément aux instructions ou dans le cas d'une modification de la machine à laquelle nous n'avons pas donné notre accord.

La déclaration de conformité n'est valable que si la machine est utilisée avec le groupe hydraulique HA1ES ou HA3.

Normes harmonisées utilisées, en particulier :
voir point 1

Hiermede verklaren wij, dat de hierna genoemde machine op grond van haar constructie en type alsmede de door ons in de handel gebrachte uitvoering aan de desbetreffende fundamentele eisen ten aanzien van de veiligheid en de gezondheid voldoet.

Wordt de machine niet overeenkomstig haar bestemming gebruikt of worden hieraan niet met ons overeengekomen wijzigingen aangebracht, dan verliest deze verklaring haar geldigheid.

De conformiteitsverklaring is slechts geldig, indien de machine met het hydraulische aggregaat HA1ES of HA3 wordt aangedreven.

Toegepaste geharmoniseerde normen, in het bijzonder:
zie punt 1

Datum / Herstellerunterschrift: 01.08.05

Angaben zum Unterzeichner:



Geschäftsführer

Con la presente declaramos que la máquina denominada a continuación, por su concepto y por su construcción, cumple con los requisitos fundamentales de seguridad y sanidad en vigor. Lo dicho aplica exclusivamente a la máquina en su versión original, tal y cual ha sido fabricada por nosotros.

El empleo inapropiado de la misma, así como cualquier modificación ejecutada sin nuestra intervención hace que esta declaración pierda su validez.

Para que esta declaración de conformidad tenga validez, la máquina se habrá de operar categóricamente con un grupo hidráulico tipo HA1ES o tipo HA3.

Normas armonizadas aplicadas, en particular:

véase bajo el punto 1

Si dichiara che la macchina appresso descritta soddisfa, per concetto, tipo e modello messo in commercio, le esigenze di base di sicurezza e sanità relative a tali apparecchiature.

In caso di uso non appropriato della macchina o in caso di una sua modifica eseguita senza il nostro accordo, questa dichiarazione non ha più effetto.

La dichiarazione di conformità è valida solo se la macchina è messa in funzione con il gruppo idraulico HA1ES o HA3.

Norme armonizzate applicate, in particolare

vedi punto 1

Härmed försäkrar vi att nedan nämnd maskin motsvarar de tillämpliga och principiella säkerhets- och hälsoföreskrifterna både gällande koncipieringen och konstruktionen samt gällande den av oss sålda modellen.

Används denna maskin inte enligt anvisningarna eller förändras maskinen på ett sätt som vi inte har godkänt, gäller denna försäkran ej.

Konformitetsförsäkran gäller endast om maskinen drivs med hydraulikkaggregat HA1ES eller HA3.

Tillämpade harmoniserade normer, i synnerhet:

se punkt 1

Täten vakuutamme, että seuraavassa nimetty kone vastaa suunnittelunsa, rakenteensa sekä meidän taholtamme liikenteeseen päästetyn mallinsa puolesta asiaankuuluvia perustavaa laatua olevia turvallisuus- ja terveystämääräyksiä.

Jos konetta ei käytetä määräysten mukaisesti tai jos koneeseen tehdään muutos ilman meidän suostumustamme ei tämä selvitys enää päde.

Standardinmukaisuusselvitys on vain silloin voimassa, kun konetta käytetään hydraulisen yksikön HA1ES tai HA3 kanssa.

Käytetyt harmonisoidut standardit, varsinkin:

katso Kohta 1

Herved erklærer vi at den i det følgende betegnede maskinen på grunn av dens konsipering og konstruksjon samt utførelsen som vi har brakt på markedet tilsvarende de respektive grunnleggende krav til sikkerhet og helse.

Ved en bruk av maskinen som ikke er formålstjenlig eller ved en endring av maskinen som ikke er avstemt med oss mister denne erklæringen sin gyldighet.

Konformitetserklæringen er bare gyldig hvis maskinen drives med hydraulikkaggregatet HA1ES eller HA3.

Benyttede harmoniserte standarder, særlig:

se punkt 1

Declaramos pelo presente, que a máquina a seguir designada, na sua planificação e construção, assim como no modelo por nós comercializado, obedece às respectivas exigências fundamentais de segurança e de saúde.

A presente declaração perde a validade em caso de uso impróprio da máquina ou em caso de modificações na máquina, que não tenham sido acordadas antecipadamente connosco.

A declaração de conformidade é válida somente quando a máquina é accionada com o agregado hidráulico HA1ES ou HA3.

Normas harmonizadas aplicadas, especialmente:

vide parágrafo 1

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 mm² (8 AWG to 4/0.)

Minimum Quantity of the Pressing Operations:



Cross Section mm ²	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	min. 150	bar (2200 psi)	
(measured on hydr. unit)	max. 160	bar (2346 psi)	
Power:	59.5	kN	(5.95 tonf)

Operation

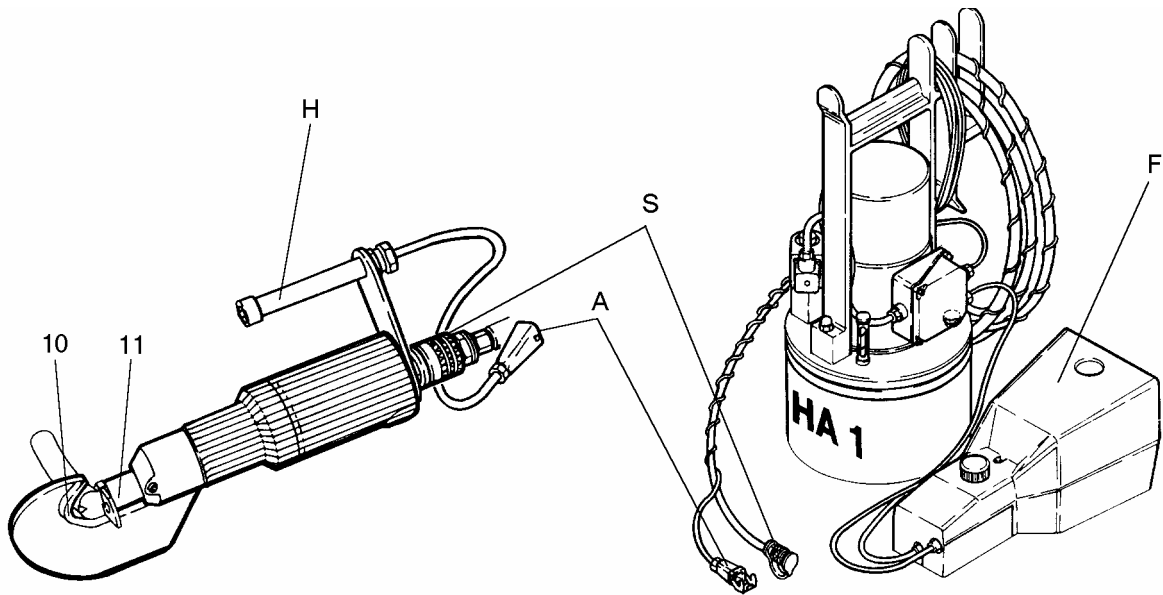
Crimping has three phases:

- 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.

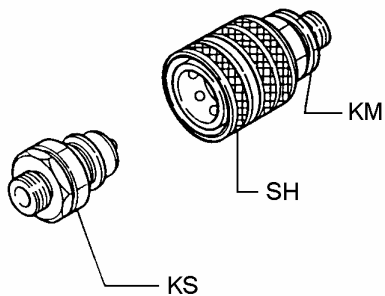
The three phases are carried out automatically.

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:

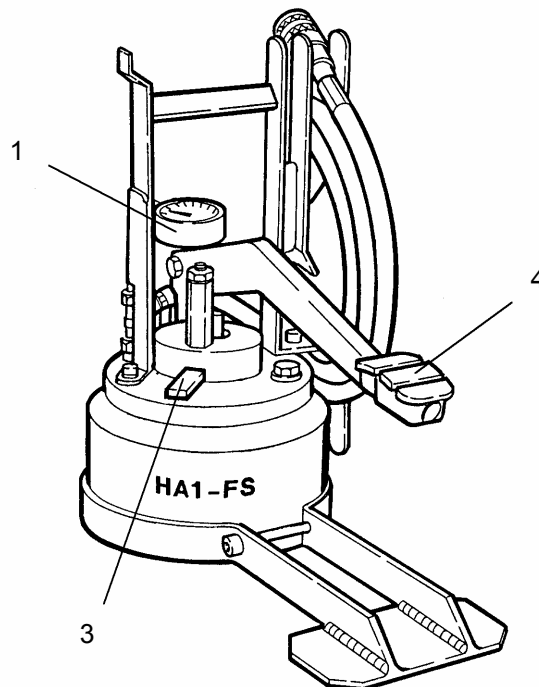
A: **HA1ES**

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.

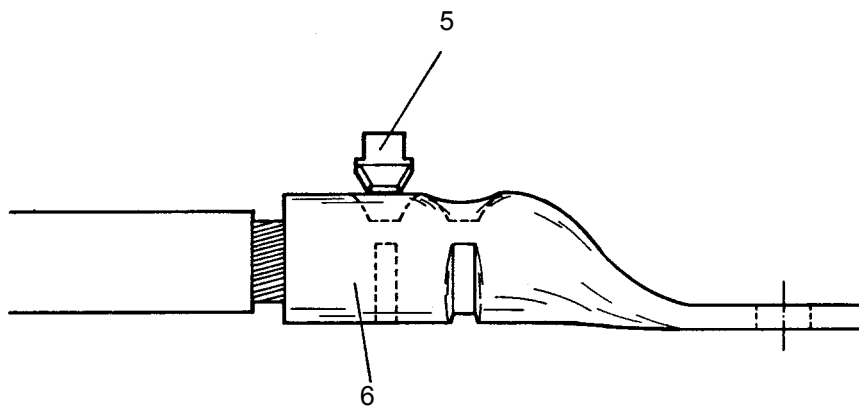
OTHERWISE THE NEXT PRESSING WILL BE TOO DEEP!

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).

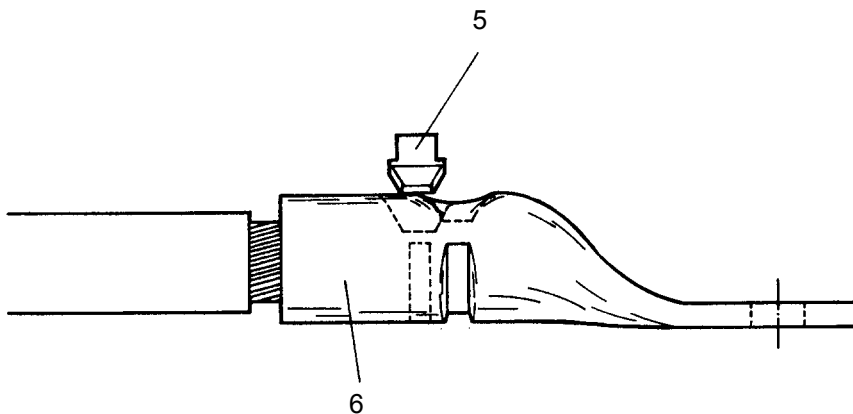
- Select the distance to the next pressing operations such that the tool is fully contacting a nondeformed area.

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:

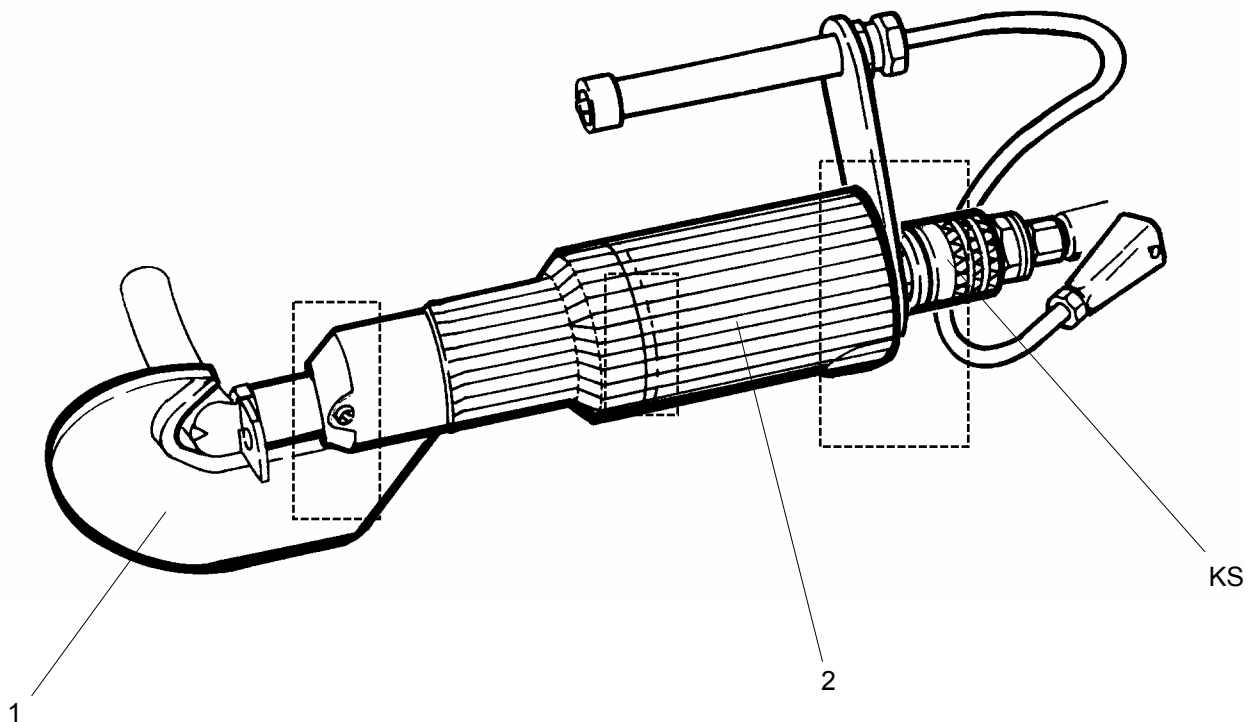
Check upper and lower tool for any damage. Replace, if necessary.

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

novopress

Scharnhorststraße 1
D-41460 Neuss

Postfach 101163
D-41411 Neuss
Tel. 02131 / 288-0
Telefax 02131 / 28855