

#### **1. Introduction**

Do not unpack or operate the crimping machine until you have thoroughly read this manual.

All who operate the crimping machine must read this manual.

This manual provides necessary information for safe use of this machine.

This manual is the result of continual development, testing and technical evaluations that are registered and verified by BAR Group according to 2006:42/EG, 2004:108/EG, 2006:95/EG, EN614-1, EN614-2, 97/23/EG.

This information is intended only for specialized operators who can operate the machine without risk to themselves, other persons, property, the machine, or the environment.

The operator should have fundamental knowledge in trouble-shooting methods, perform machine inspections and simple maintenance according to the information provided in this manual and according to local legislation for protection of health and safety.

This manual does not explain disassembly or comprehensive maintenance in detail. These may only be performed by an authorized service technician.

It is necessary to store the manual and keep it in good condition for future use. Contact your closest authorized supplier for a replacement manual or additional information if necessary.

This manual should be preserved and stored for the length of the machine's lifetime or at least ten (10) years in a well-known, easily accessible location together with other mach-ine documentation.

BAR Group is not liable for injury/damage to persons/machine or property as a result of improper use, having made prohibited modifications to the machine or misin-terpreting this manual's safety instructions.

# 2. Safety rules

Always ensure that the minimum standards for safety, installation and operation are complied with before operating the machine. Observe the surrounding environmental conditions such as tempera-ture, humidity, lighting, vibrations, dust and other conditions at the machine operation site. Never remove the machine's information or warning plates. Ensure that they remain clearly readable. Contact an authorized service workshop for replacement plates if they become unreadable.

The use of any spare parts that deviate from this manual's specifications, any other changes/manipu-lations (however insignificant) made to your machine releases BAR Group from any liability for consequences



that arise due to the machine's performance, level of safety for nearby persons and/or personal property.

Disassembling or side-stepping safety devices or rules is extremely hazardous and absolutely prohibited. Refusal to follow these requirements puts others at severe risk of injury!

Always dispose of operation waste according to current local laws and regulations.

#### Note!

All maintenance not described in this manual must be performed by an authorized service technician.

#### 3. Equipment

L-TCH-B25 is a portable, manual crimping machine for hydraulic hose intended for use in service vehicles. the machine is designed for smaller hose crimping series and not intended for large-scale production.

The machine consists of a chassis, crimping head and hand pump unit and is delivered ready to use, packed in a wooden box on a pallet.

L-TCH-B25 is a portable crimping machine powered by compressed air, intended for use in service vehicles in the field where compressed air is available. The machine is designed for smaller hose-crimping series and not intended for large-scale production.

The machine consists of chassis, crimping head and pneumatic-hydraulic pump and is deli-vered ready to use, packed in a wooden box on a pallet.

#### Note!

Always dispose of operation waste according to current local laws and regulations.

The machine is delivered with.

Grease tube

- •
- Manual (See separate manual for the pump)
- Certification of compliance according to CE requirements
- •



# 3.1 Warranty

The warranty lasts one (1) year from purchase and only under the strict condition that the manual instructions have been followed. The warranty covers defected material/parts and flawed workmanship, replacing defected parts cost.

The warranty does not cover improper use or normal wear. travel costs, time for repair and shipping costs are not covered by the warranty. Repairs under the warranty are to be made only by BAR Group or an authorized service technician approved by Hydros-cand machine Ab. Lost income or extra costs that may arise for any reasonare not covered by the warranty.

#### Note!

Ensure that the machine is undamaged and that all of the described items are present upon arrival or shortly after.

# **3.2 Important**

L-TCH-B25 is designed, manufactured and made safe for crimping hydraulic hose in dimensions 3/16" -1". Any other use of this machine is considered improper and hydroscand Machine AB is not liable for injury or damage to persons, property or the machine. The machine shall only be used for crimping hydraulic hose according to specifi cation. Hydros-cand Machine AB's instructions for operating conditions and limitations for use/operation as well as health and safety regulations must be complied with.

Warning !

Pinch point!

Keep hands and all other body parts away from the red-indicated area while crimping.

# 3.3 Identifi cation

The machine can be identified by the label with the following information located on its backside:

Manufacturer

Serial number

Manufactured year

Weight



#### Note!

It is absolutely prohibited to remove or damage the identifi cation plate. Contact an authorized service workshop for new plats if they become damaged and unreadable.

Always provide the following information and technical explanation of the machine' sproblem when contacting the authorized service workshop.



#### L-TCH-B25

- 1. pump handle
- 2. carrying handle
- 3. Indication lamp lights when the set crimping measurement is reached.
- 4. Test button for battery and LED
- 5. Crimp diameter adjusting knob
- 6. return valve
- 7. battery compartment
- 8. dies
- 9. die set storage

# 4. Start-up

#### 4.1 Machine placement

Place the machine on a stable and flat surface. Set the adjustable machine feet so that they cannot be over-turned or fall from the surface.



Connect compressed air to L-TCH-B25, minimum 4,1bar max 6,9Bar.

# 4.2 Selecting dies

Determine the crimping dimensions for the current operation and select the die set with the correct interval that corresponds to the crimping measurement.

For example: A crimping measurement of 17 mm requires the die set size nr 16 (since it covers the 16-19mm interval).

Always select the die set within the correct interval to achieve the best crimping results. Every die ismarked with the smallest crimping measurement in the interval.

Note!

Crimping any measurements outside the table crimping measurement interval is not recommended.

Using dies that are too small risk the ferrule becoming oval.

# 4.3 Setting crimping measurements

On the machine is a die set table that indicates the correct crimping measurement interval for every die set. crimping measurements that lie outside of the interval are not recommended.

Turn the adjusting knob so that the zero (0) on the dial is lined-up with the zero (0) on the scale. If zero (0) is set, the machine will crimp the smallest diameter provided in the interval. Every revolution of the knob increases the value on the scale with one unit. One turn clock-wise corresponds to 0.1 mm on the crimping measurement. the measurement shall be added to the least-specified diameter in the interval.

Die Set	
Crimping area	Base Die
25-10	10-12 mm
25-12	12-14 mm
25-14	14-16 mm
25-16	16-19 mm
25-19	19-23 mm
25-23	23-27 mm
25-27	27-31 mm
25-31	31-36 mm
	39-45 mm



For example: Crimping 16 mm hose requires die nr 16 with the adjusting knob set to zero (0) and lined up with zero (0) in the window. crimping 22,2 mm hose recommends die nr 19 with the adjusting knob turned 3 (three) clock-wise rotations until 3 (three) on the scale and the 2 (two) on the dial is lined up with the zero (0) line on the scale.

The set crimping measurement values can differ slightly from the actual crimping measurement because the machine's die expansion and retraction. Compensate this by adjus- ting the setting.

# 4.4 Changing die sets

1.

Retract the dies completely by turning the return valve one turn.

For the L-TCH-B25: Push the manoeuvre handle 1 (see page 7) until dies are fully retracted.

2.

Remove the die set by turning it in either direction or pulling it straight out (radially). If the die set cannot be removed by hand, then a screwdriver or other similar tool may be used.

3.

Ensure that the 8-segment die set is clean, undamaged and that all are marked with the same number.

4.

With the die marking numbers facing you, insert each die clicking the die pins in their holes in the crimping head.

5.

Ensure that all dies are correctly inserted in the machine.

# 4.5 Crimping

1.

When the die set is inserted in the machine and the crimping measurement set, place the hose/pipe application between the dies.

2.

L-TCH-B25: Turn the return valve clockwise until it is closed. Pump until the indication lamp lights.L-TCH-B25. L-TCH-B25: Push the manoeuvre handle 1 (see page 7) until the indication lamp lights.

3.

L-TCH-B25: Turn the return valve counter-clockwise to retract dies and release the application.L-TCH-B25.



L-TCH-B25: Push the manoeuvre handle to the right and hold it in place until dies are fully retracted.

4.

Make sure that the crimping was correct and make adjustments if necessary.

5.

Ensure that all dies are correctly inserted in the machine.

#### 5. Maintenance

#### 5.1 Lubrication

The machine should be cleaned and lubricated every eight (8) operation hours. Retract the dies to lubricate. Use a small brush to lubricate the cone shaped surfaces in the cylinder.

Better to lubricate sparingly and more often than seldom and excessively. Without lubrication, the machine looses power and you will damage the sliding surfaces.

Use only the lubrication recommended by BAR Group AB: Optimol viscogen 4.

# 5.2 Changing the oil

The oil should be changed once per year. Retract the dies. Fill oil to the mark on the oil stick (see separate pump manual).

Use only the oil recommended by BAR Group: part no. 82504621.

# 5.3 Changing the battery

When the indicator lamp begins to light weaker then it is time to change the battery. Open the lid and remove the battery.

Battery type: 9V.

Note!

Always dispose of discarded batteries according to current environmental regulations.