



1	Crimping head
2	Crimping data reached indicator
3	Battery Cage
4	Light Indicator Test Button
5	Pump handle
6	Hand pump
7	Oil Cap
8	Grip
9	Drawer
10	Micro Dial

Safety



Hazard! If these instructions are not followed, there is a risk of life and limb and property damage!

Caution

All Die Sets Required to be installed Clockwise 1 2 3 4 5 6 7 8 if you look in front of the crimping machine. Die number 1 could install to any master die, but the following die number 2 should be beside the die number 1 and clockwise. Especially for the die number under 16 mm. This is important to keep the ferrule crimped with good roundness.



Please comply with the Operating Instructions! Incorrect handling may result in serious injuries. Read the Operating Instructions before using the unit.

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 according to 2006:42/EG, 2004:108/EG, 2006:95/EG, 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 machine documentation.

We are not liable for injury/damage to persons/machine or property as a result of improper use, having made prohibited modifications to the machine or misinterpreting 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 temperature, 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/manipulations (however insignificant) made to your machine releases from any liability for consequences that arise due to the machine's performance, level 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

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

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

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 SAMWAY or an authorized service technician approved by SAMWAY. Lost income or extra costs that may arise for any reason are 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. We are not liable for incorrect or missing parts that are not reported within eight(8) days after delivery.

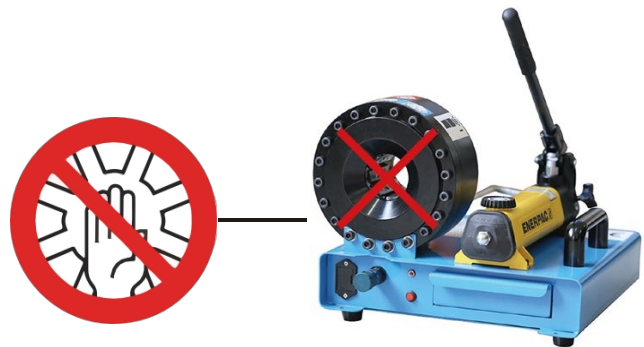
3.2 Important

P16 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 SAMWAY 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 specification. SAMWAY 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 Identification

The machine can be identified by the CE-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 identification plate. Contact an authorized service workshop for new plates if they become damaged and unreadable.

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



The choice of perfection

4. Start-up

4.1. Machine placement

Place the machine on a stable and flat surface. For P16HPZ model, please connect the hydraulic hose with quick male fittings to the port and tighten the fittings at back side of the crimper. Please check if there are hydraulic oil inside the pump, also check if the battery of the crimper.



The choice of perfection

4.2. Selecting dies

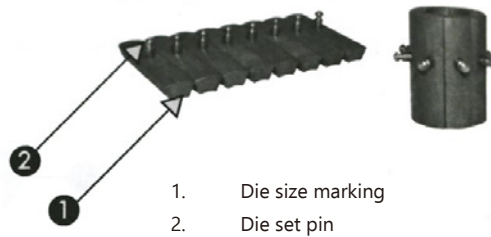
Determine the crimping dimensions for the current operation and select the die set with the correct interval that corresponds to the crimping measurement.

For example: A crimping measurement of 17 mm requires the die size nr 16 (since it covers the 16-19 mm interval). Always select the die set within the correct interval to achieve the best crimping results. Every die is marked 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.

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



1. Die size marking
2. Die set pin

4.3 Setting crimping measurements

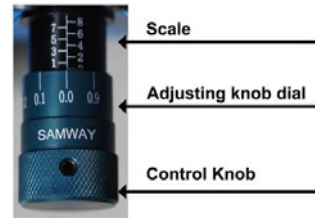
With the machine is a die set table packed that indicates the correct crimping measurement interval for every die set. Crimping measurements that lie outside of the interval are not recommended.

1. Die size marking
2. Die set pin

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.

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 adjusting the setting.



DIE SET	0 turn	1 turn	2 turn	3 turn	4 turn	5 turn	6 turn	7 turn						
16-10	10	11	12	USE NEXT SIZE!										
16-12	12	13	14											
16-14	14	15	16											
16-16	16	17	18											
16-19	19	20	21							22	23			
16-23	23	24	25							26	27			
16-27	27	28	29							30	31			
16-31	31	32	33							34	35	36	37	38
Masterdies	39	40	41							42	43	44	45	46

4.4 Changing die sets

1. Retract the dies completely by turning the return valve one turn.
2. Remove the die set by turning it either direction or pulling it straight out (radially)
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. Ensure that all dies are correctly inserted in the machine.
2. The crimping diameter is reached when the light in red become light.
3. Make sure that the crimping was correct and make adjustments if necessary.

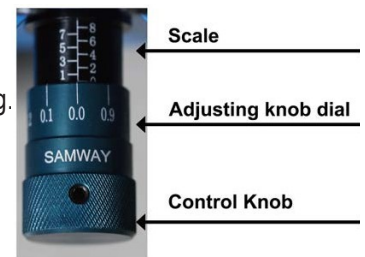
5. Maintenance

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 loses power and you will damage the sliding surfaces. Use only the lubrication: Optimol viscogen 4.

5.2. Calibration

1. Contract (press) the dies together completely. If the actual crimping measurement differs too much from the set crimping measurements then calibrate the machine.
2. Set the dial to - 0.2.
3. Loosen the side covers.
4. Loosen the locking nut (nr 1).
5. Turn the adjustment dial (nr 2) so that the end surface of the set screw (A) align with the face of the ring.
6. Tighten the locking nut (nr 1).
7. Calibration is complete.
8. Check Repeat the procedure if the actual crimping measurement differs from the set crimping measurement.



6. Trouble shooting

Problem	Reason	Solution
Low crimping force:	<ol style="list-style-type: none"> 1. Insufficient lubrication. 2. Return valve not closed. 3. Leakage. 4. Pump leakage. 	Lubricate. Close the valve. Repair Replace seals.
Crimping measurement is inconsistent	<ol style="list-style-type: none"> 2. Insufficient lubrication. 3. Adjusting knob lost its position. 	Lubricate. Calibrate.

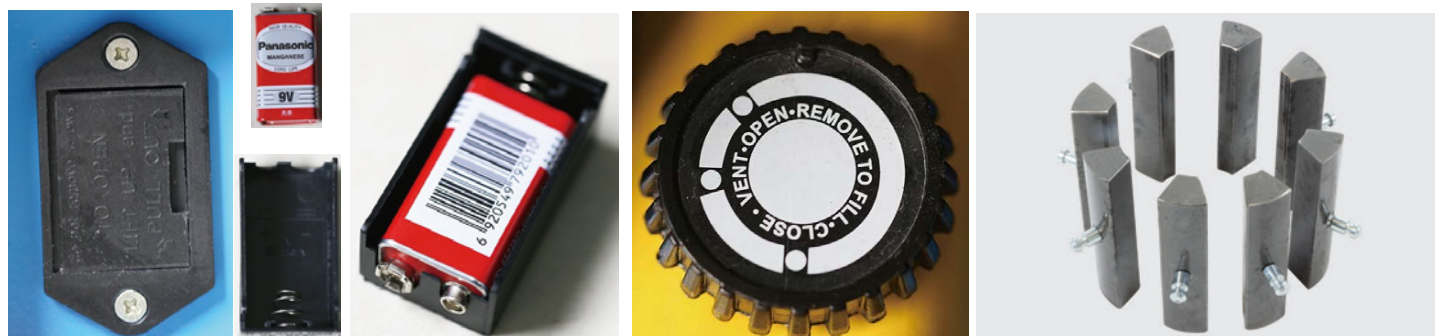
Battery and Oil

(required in most cases)

Products shipped by sea or air, battery and oil will be removed for the safety reasons (Regulation for the sea and air shipping, DHL, UPS, FEDEX, TNT etc.) So you need to insert the battery and fill the oil before the machine can be operated normally.

Caution Use of Hand Pump!

- 1: For correct hand pump operation: the oil cap shall be turned on ventilation towards arrow on the pump.
- 2: During the transit while the pump is not in use, please turn the close position for this. But do turn it to ventilation when the pump is in operation, fail to so will result seal damages and repair kit costs.



Technical Data	
Crimping range in mm	10 – 45
Crimping range in inch	0.39 – 1.77
Crimping force in metric tons	95,5
Crimping force in kN	955
Maximum hose size in inches	3/16" – 1"
Die SET	H 16
Maximum travel of dies in mm	20 mm
Master Die Diameter / Length in mm	39 / 64
Master Die Diameter / Length in inch	1,54 / 2,52
Machine Control	Manuell
Max. pressure	630 bar
Depth width height	180 x 230 x 270 mm
Weight	20 kg

Dies	R+M Nr.
SET 10-12 mm	300 501 0
SET 12-14 mm	300 501 2
SET 14-16 mm	300 501 4
SET 16-19 mm	300 501 6
SET 19-23 mm	300 501 9
SET 23-27 mm	300 502 3
SET 27-31 mm	300 502 7
SET 31-38 mm	300 503 1