

SIP Industrial Products Limited  
Gelders Hall Road  
Shepshed  
Loughborough  
Leicestershire  
LE12 9NH  
United Kingdom

# SIP 12T Hydraulic Pipe Bender 03683



For help or advice please  
contact your distributor, or sip  
directly on: Tel.: 01509 500400  
Email:sales@sip-group.com or  
technical@sip-group.com  
www.sip-group.com

**Ssip**  
SIP INDUSTRIAL



# CONTENTS

Page No.	Description
3.	Contents
4.	Safety Instructions
6.	Guarantee
7.	Operating Instructions
9.	Maintenance
10.	Exploded Drawing
11.	Part List
12.	Notes
13.	Notes
14.	UK - Declaration Of Conformity
15.	EU - Declaration Of Conformity

# SAFETY INSTRUCTIONS



Danger / Caution: This picture indicates risk of personal injury and/ or the possibility of damage.



Note: This picture indicates supplementary information.



Important: Please read the following instructions carefully, failure to do so could lead to serious personal injury and / or damage to the item.

When using your pipe bender, basic safety precautions should always be followed to reduce the risk of personal injury and / or damage to the bender or load.

Read all of these instructions before operating the product and save this user manual for future reference.

The product should *not* be modified or used for any application other than that for which it was designed.

It was designed for bending steel pipe only, galvanised and black. If you are unsure of its relative applications do not hesitate to contact us and we will be more than happy to advise you.

Before operating the product always check no parts are broken, that no oil is leaking and that no parts are missing.

Always operate the product safely and correctly.

**KNOW YOUR PIPE BENDER:** Read and understand the owner's manual and labels affixed to the product. Learn its applications and limitations, as well as the potential hazards specific to it.

**KEEP CHILDREN AND UNTRAINED PERSONNEL AWAY FROM THE WORK AREA:** All visitors should be kept at a safe distance from the work area; never allow untrained persons to operate the shop press.

**STAY ALERT:** Always watch what you are doing and use common sense.

**NEVER LEAVE THE BENDER UNATTENDED:** When in use / under load.

**HAVE YOUR PRODUCT REPAIRED BY A QUALIFIED PERSON:** The product is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user and void the warranty.

## SAFETY INSTRUCTIONS...cont

**DANGER!** Check that the product is in sound condition and good working order; Take immediate action to repair or replace damaged parts.

**WARNING!** Only operate on a level and stable surface and never use on soft ground where the product is likely to “sink” whilst in operation.

**NEVER STAND ON THE PRODUCT:** The product is not designed for this purpose.

**DO NOT** dismantle or tamper with the product, as this may be dangerous and will invalidate the warranty.

- If a problem with the bender is experienced or suspected stop using the product *immediately* and contact your distributor for repair.
- Do not attempt to press a load that exceeds the rated capacity of the product.
- Regularly inspect, clean and lubricate the shop product, ensuring that it is in good working order and condition.
- Always ensure that the work area is clean and tidy, free from unrelated materials and has adequate lighting.
- Keep hands, limbs etc. clear of moving parts during operation of the ram.
- **DO NOT** top-up the bender with brake fluid, or other oil types; use hydraulic oil only.
- **DO NOT** adjust the safety overload valves.
- Clean the product correctly, with the ram in the down position, but **DO NOT** leave it extended.
- Failure to follow the warnings in this manual, may result in personal injury and/or property damage.
- Prior to applying the load, be sure that the hydraulic ram nut threads are fully engaged to the head assembly.
- Components of this shop press are specially designed to withstand the rated capacity. Do not substitute bolts, pins, or any other components.
- Always press the load on the centre of the ram. Offset loads can damage the ram, and may cause a workpiece to eject.
- Before operating, check for signs of cracked welds, bent support pins, loose or missing bolts, or any other structural damage. Do not operate if any of these conditions exist. Have repairs made only by an authorised service centre / engineer.
- Parts being pressed may splinter, shatter or eject from the bender. Due to various applications, it is your responsibility to always use adequate guards, such as eye protection and heavy protective clothing, when operating this .
- Do not stand in front of work area where the load is applied.

## SAFETY INSTRUCTIONS...cont

- If the product appears to be damaged in any way, is found to be badly worn, or operates abnormally *IT SHOULD BE REMOVED FROM SERVICE* until necessary repairs are made by an authorised service centre.
- *DO NOT* use the product to compress springs or any other item that could disengage and cause a potential hazard.
- *Understand the operating environment;* Before each use the operator should assess, understand and where possible reduce the specific risks and dangers associated with the operating environment. Bystanders should also be made aware of any risks associated with the operating environment.



*Danger:* Never exceed the maximum capacity of 12 ton, overloading can lead to personal injury or damage to the pipe bender.



*CAUTION:* The warnings and cautions mentioned in this user manual can not cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied.

## GUARANTEE

This SIP Pipe Bender is covered by a 2 year parts and labour warranty covering failure due to manufacturers defects. This does not cover failure due to misuse or operating the pipe bender outside the scope of this manual - any claims deemed to be outside the scope of the warranty may be subject to charges Including, but not limited to parts, labour and carriage costs.

This guarantee does not cover consumables such as oil, springs, formers etc.

In the unlikely event of warranty claims, contact your distributor as soon as possible.



*Note:* Proof of purchase will be required before any warranty can be honoured.

# OPERATION

The tool is provided with six Bending Formers.

This enables the following sizes of British Standard Pipe, to BS1387, to be bent to any angle up to 180 degrees.

**1/2 , 3/4, 1, 1-1/4, 1-1/2, and 2 inches**

Consult the chart below to ensure the correct die for the corresponding pipe is used. If the wrong former is used, the quality of bend will be severely compromised.

With the pipe resting in the former, and with the ram in its lowest position, (open the hydraulic valve by turning it anticlockwise), secure the guide rollers in place using the R Clips (see parts diagram).

Nominal Bending Die/Pipe Size	Inside Diameter (Bore)				Outside Diameter (Actual size of Bending Die)	
	Medium		Heavy		Medium/Heavy	
	mm	inch	mm	inch	mm	inch
BSP						
1/2"	16.2	0.65	15.0	0.59	21.4	27/32
3/4"	21.7	0.85	20.5	0.81	26.9	1-1/16
1"	27.4	1.08	25.8	1.02	33.8	1-3/8
1-1/4"	36.1	1.42	34.5	1.36	42.5	1-11/16
1-1/2"	42.0	1.65	40.4	1.59	48.4	1-29/32
2"	53.1	2.09	51.3	2.02	60.3	2-3/8

***ALWAYS ensure the pipe is located securely and square in the die,***

Close the hydraulic valve by turning it clockwise fully, then pump the operating lever gently.

***NOTE: For best results, bend the pipe progressively. Set the guide rollers wide apart to begin with, bringing them closer together as the degree of bend increases.***

When completed, open the hydraulic valve. This allows the work to be removed.

To remove the former from the work, a short sharp tap with a hammer and brass drift should be all that is required. TAKE CARE when removing...NEVER hammer directly on the edges of the former.

## OPERATION...cont

The Hydraulic Pipe Bender is designed for bending STEEL PIPE ONLY, either galvanised or black finish.

Please familiarise yourself with its operation, so that it may be used properly in order to provide you with long and satisfactory service.



*CAUTION:* This bender is not designed to bend thin wall tube - e.g. copper

## MAINTENANCE

This tool requires no maintenance except for keeping it clean.

Always visually inspect before each use to ensure no welds are cracked or broken, and that the tool is in good general condition.

If it is damaged or if in doubt as to its serviceability, consult SIP After Sales - 01509 500400 or your local SIP distributor.

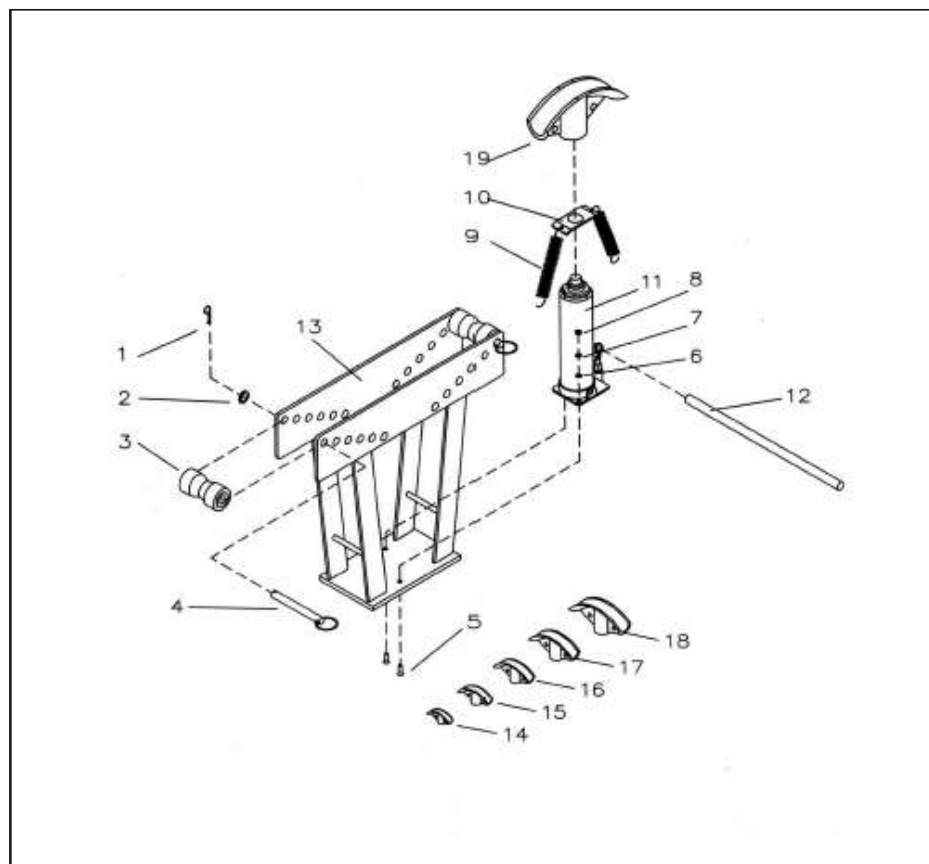
ALWAYS store the tool with the ram in its lowest position.

Store in an upright position.

Resist from laying the product on its side. This will prevent air entering the system and the necessity to bleed the ram. Air in the system will result in poor performance.

Bleeding the ram: With the ram in its vertical position, close the release valve at the base of the ram unit (turn it clockwise), then remove the rubber bung on the upper part of the cylinder. Pump the handle several times to expel all air, then replace the rubber bung.

# EXPLODED DRAWING



# PART LIST

<i>Ref. No.</i>	<i>Description</i>	<i>Sip Part No.</i>
1.	<i>R-clip</i>	<i>HY02-00125</i>
2.	<i>Washer</i>	<i>HY02-00126</i>
3.	<i>Roller</i>	<i>HY02-00127</i>
4.	<i>Pin</i>	<i>HY02-00128</i>
5.	<i>Bolt (M10x30)</i>	<i>HY02-00129</i>
6.	<i>Washer M10</i>	<i>HY02-00046</i>
7.	<i>Spring washer M10</i>	<i>HY02-00047</i>
8.	<i>Nut M10</i>	<i>HY02-00048</i>
9.	<i>Spring</i>	<i>HY02-00130</i>
10.	<i>Plate</i>	<i>HY02-00131</i>
11.	<i>Pump</i>	<i>HY02-00132</i>
12.	<i>Handle</i>	<i>HY02-00133</i>
13.	<i>Frame</i>	<i>HY02-00134</i>
14.	<i>1/2" Pipe former</i>	<i>HY02-00135</i>
15.	<i>3/4" Pipe former</i>	<i>HY02-00136</i>
16.	<i>1" Pipe former</i>	<i>HY02-00137</i>
17.	<i>1 1/4" Pipe former</i>	<i>HY02-00138</i>
18.	<i>1 1/2" Pipe former</i>	<i>HY02-00139</i>
19.	<i>2" Pipe former</i>	<i>HY02-00140</i>





**Declaration of Conformity**

We

SIP (Industrial Products) Ltd  
Gelders Hall Road  
Shepshed  
Loughborough  
Leicestershire  
LE12 9NH  
England

As the manufacturer within the UK, England, Scotland & Wales,  
declare that the

SIP Ton Hydraulic Pipe Bender - SIP Part No. 03683

**Conforms to the requirements of the following regulation(s), as indicated.**

Supply of Machinery (Safety) Regulations 2008

**And the relevant harmonised standard(s), including**

BS EN ISO 12100:2010  
BS EN 1494:2000+A1:2008

Signed:



Mr P. Ippaso - Managing Director - SIP (Industrial Products) Ltd  
Date: 14/07/2021



**Declaration of Conformity**

We

SIP (Machinery Europe) Ltd  
ASM Chartered Accountants  
First Floor Block One  
Quayside Business Park  
Dundalk  
County Louth  
Republic of Ireland

As the manufacturer's authorised representative within the EC  
declare that the

SIP 12 Ton Hydraulic Pipe Bender - SIP Part. No. 03683

**Conforms to the requirements of the following directive(s), as indicated.**

2006/42/EC - Machinery Directive

**And the relevant harmonised standard(s), including**

EN ISO 12100:2010  
EN 1494:2000+A1:2008

Signed:



Mr P. Ippaso - Managing Director - SIP (Industrial Products) Ltd  
Date: 14/07/2021





Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.

Never dispose of electrical equipment or batteries in with your domestic waste. If your supplier offers a disposal facility please use it or alternatively use a recognised recycling agent. This will allow the recycling of raw materials and help protect the environment.

**FOR HELP OR ADVICE ON THIS  
PRODUCT PLEASE CONTACT  
YOUR DISTRIBUTOR, OR SIP  
DIRECTLY ON:**

**TEL: 01509 500400**

**EMAIL: [sales@sip-group.com](mailto:sales@sip-group.com) or  
[technical@sip-group.com](mailto:technical@sip-group.com)  
[www.sip-group.com](http://www.sip-group.com)**