

# Clariflex®

## STRONG-ARM



### STRUT SPRING COMPRESSOR

MODEL NO: SSC1000G

PART NO: 7630030

### OPERATION & MAINTENANCE INSTRUCTIONS



ORIGINAL INSTRUCTIONS

GC0721 rev 1

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## **INTRODUCTION**

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Thank you for purchasing this CLARKE strut spring compressor.

Before attempting to operate the machine, it is essential that you read this manual thoroughly and carefully follow all instructions given. In doing so you will ensure the safety of yourself and that of others around you, and you can also look forward to the spring compressor, giving you long and satisfactory service.

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## **GUARANTEE**

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This CLARKE product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned to us without prior permission. This guarantee does not effect your statutory rights

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## TECHNICAL SPECIFICATIONS

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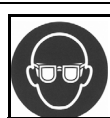
Rated Load Capacity	1000 kg
Net Weight	34.9 kg
Dimensions D x W x H	610 (o/a guards) x 515 x 1180 mm (o/a pedal)
No of strokes to full extension	128
Ram travel per stroke	2.44 mm
Total Range	320 mm
Lower strut support to upper clamping bracket	150-510 mm
Maximum spring diameter (3 sizes)	210 mm
Maximum spring length	520 mm
Pump oil capacity	270 ml
Oil grade	VG15 hydraulic oil

## SAFETY PRECAUTIONS

- Due to the weight of the product the help of an assistant may be required during installation. Secure the spring compressor to a firm level floor using suitable anchor bolts (not supplied).
- Before starting work, check for signs of cracked welds, loose or missing bolts, damaged guards, or any structural damage. Do not operate if any of these conditions exist. Have repairs made only by an authorised service centre.
- Never tamper with the components or modify them. The safety valve is calibrated and sealed at the factory; do not attempt to change the setting.
- Use only the recommended hydraulic oil.
- The components of this product are designed to withstand the rated load. Do not substitute any other components or exceed the rated load.
- Before applying pressure, ensure the workpiece is secure and stable.
- Always clean up spills of hydraulic oil immediately as this can be dangerous in a workshop environment.
- Do not allow any person who is unfamiliar with spring compressors to use this item unless they are under direct supervision.
- Keep children and unauthorised personnel away from the work area.
- Always apply the spring centrally under the centre of the ram. Offset loads can damage the ram and may cause the spring to be ejected.
- Always ensure the spring is properly supported.
- Springs may be ejected from the spring compressor. Always use the guards supplied.
- Keep hands and fingers away from parts that may pinch or shift.
- Never use extension tubes to increase the length of the pump handle. Excessive effort can cause damage and/or accidents.
- Wear approved impact safety goggles and heavy duty work gloves.
- Failure to heed these warnings may result in damage to the equipment, or serious personal injury.
- The following safety symbols appear on the product.



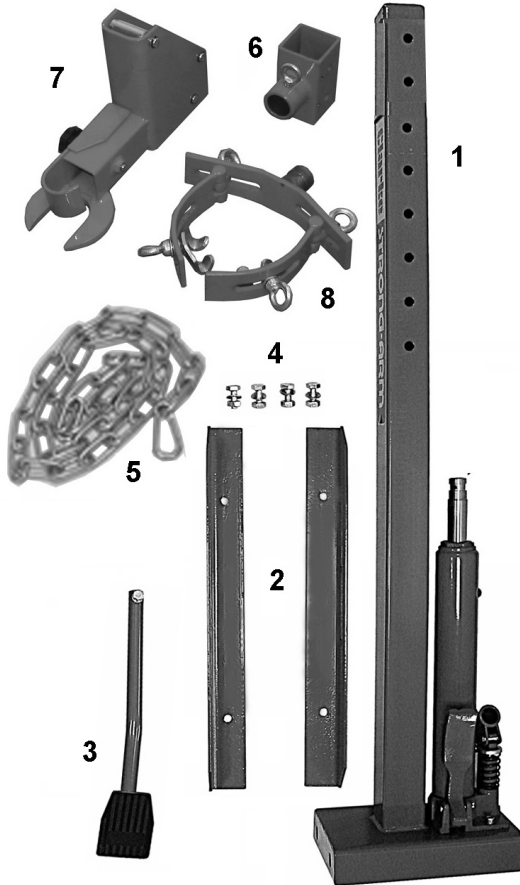
Read instruction  
manual before use



Wear safety glasses

# UNPACKING & ASSEMBLY

Ensure the product suffered no damage during transit and all components are present. Should any loss or damage become apparent, please contact your CLARKE dealer immediately. The following items are supplied.



No	Description
1	Frame & ram assembly
2	Base supports
3	Pump actuating pedal
4	Fixing Kit (bolts, nuts, washers)
5	Safety chain
6	Upper clamping bracket
7	Lower clamping bracket
8	Suspension leg clasp
9	Safety guards (LH/RH) (4 pieces)

## TOOLS REQUIRED

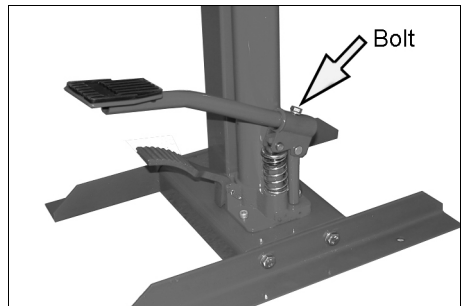
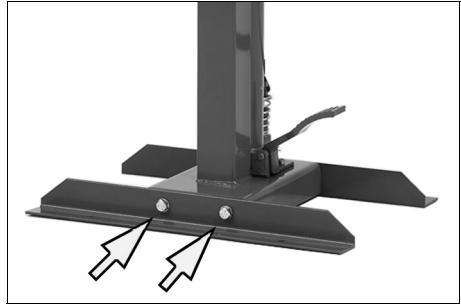
- Wrench/socket set
- Hex key

**IMPORTANT:** The spring compressor must be firmly secured to a firm and level floor using expansion bolts (not supplied). Holes are provided in the base supports for this purpose.

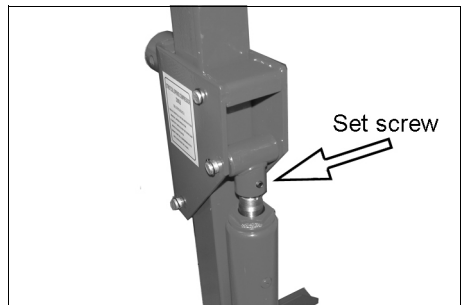
**IMPORTANT:** The spring compressor should not be stored where it will be open to the elements, as severe weather conditions will damage the hydraulic parts.

## ASSEMBLY PROCEDURE

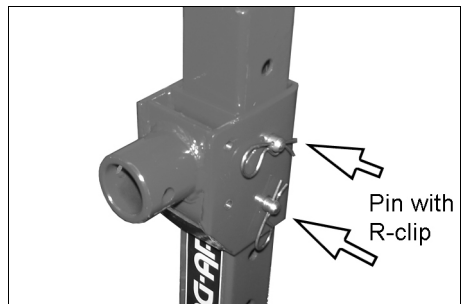
1. With the help of an assistant, attach the base supports to the frame using the nuts, bolts and washers.
2. Lift the frame assembly upright and manoeuvre it to its intended location in the workshop, noting that the operator will be standing at the side of the machine.
3. Attach the foot pedal to the frame using the bolt and washer.



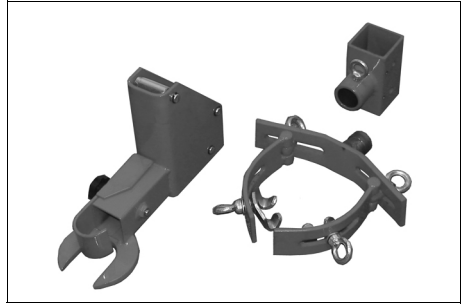
4. Fit the lower support bracket of either the suspension leg or open yoke, to the column, engaging the bracket with the end of the hydraulic ram and securing with the set-screw.



5. Fit the corresponding upper bracket to the column, securing at the required height with the pins and R-clips.
  - The removable pins provide several height settings for different length springs.



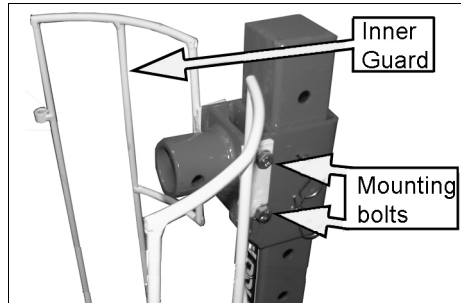
The suspension leg support kit is used to hold a front suspension leg assembly.



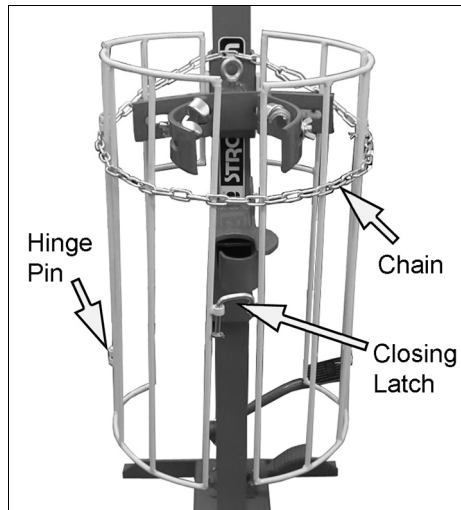
## SAFETY GUARD KIT

Fit the safety guards as follows.

1. Bolt both the inner guards to the upper bracket with four bolts.

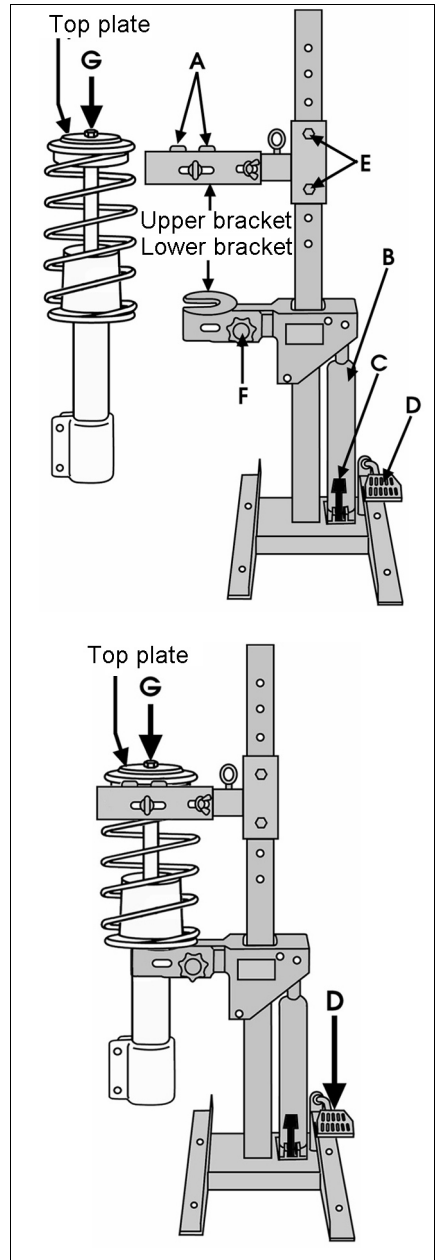


2. Add the outer guards to the inner guards, locating them using the hinge pins supplied and lock with split pins.
3. Fit the closing latch to the guards.
4. Before operating the compressor, the safety chain should be wrapped around the inner and outer guards as shown, connecting the two chain ends with the snap hook.



# OPERATION

1. Press and hold down the release valve pedal 'C' to lower the ram to its lowest position.
2. Hinge the upper brackets back,
3. Slide the suspension leg into the lower bracket and clamp in place using the clasp and knob 'F'. Do not overtighten - it should only be firm.
4. Position the upper bracket so that the two clamps 'A' fit snugly and squarely around the spring coils, as near to the top of the assembly as possible.
  - It may be necessary to remove the two pins securing the upper bracket assembly 'E' and slide the bracket up or down by the appropriate amount in order to locate the clamps 'A' correctly. Ensure the pins 'E' are locked by the R-clips before proceeding.
5. Sufficient adjustment to the upper bracket components is provided in all directions in order to ensure the clamps sit squarely and snugly onto the spring coils. Ensure all wing nuts and adjusters are finger tight only...DO NOT fully tighten.
6. Once secured, pump the pedal 'D' until all strain on the securing nut 'G' is completely relieved, (i.e. when the nut turns easily). **WARNING!** DO NOT undo the nut until this is achieved.
7. With the nut removed, remove the top plate, then carefully and gently press release lever 'C' to allow the spring to fully relax





8. When all pressure on the spring is relieved undo all restraints and remove it.
9. Support the suspension leg whilst loosening the lower bracket using the locking knob F. The suspension leg may then be removed.
10. Reassembly of the suspension leg is in reverse order.

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## MAINTENANCE

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### ROUTINELY

A visual inspection should be made before each use of the spring compressor, checking for leaking hydraulic fluid and damaged, loose or missing parts.

Owners and/or users should be aware that repair of this equipment requires specialised knowledge and facilities. It is recommended that a thorough annual inspection of the spring compressor, be made and that any defective parts be replaced with genuine Clarke parts.

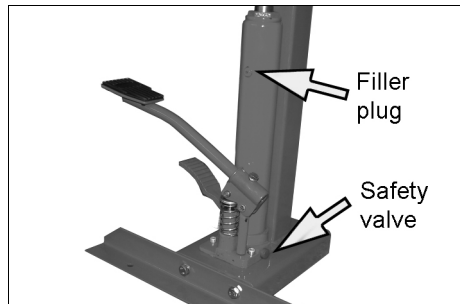
If the spring compressor appears to be damaged in any way, is found to be badly worn, or operates abnormally, it **SHOULD BE REMOVED FROM SERVICE** until the necessary repairs are made.

If the spring compressor is not to be used for any length of time, store it with the ram piston withdrawn to protect the surface of the moving parts.

### OCCASIONALLY

In the event of leaking seals, oil can be topped up via the filler plug on the side of the pump. Oil should be level with the bottom of the hole. If necessary

top up with CLARKE hydraulic oil, Part No. 3050830. **This task is carried out with the ram fully retracted.** Further repairs should be carried out by your Clarke dealer.



If any rust is apparent it must be removed and the paint restored.

In the event of an airlock, air bubbles can be purged from the ram as follows;

1. Depress the release valve pedal.
2. Pump the actuating pedal several full strokes to eliminate any air bubbles.

Top up the hydraulic oil to the lower level of the filler plug with CLARKE hydraulic oil, Part No. 3050830.

## TROUBLESHOOTING

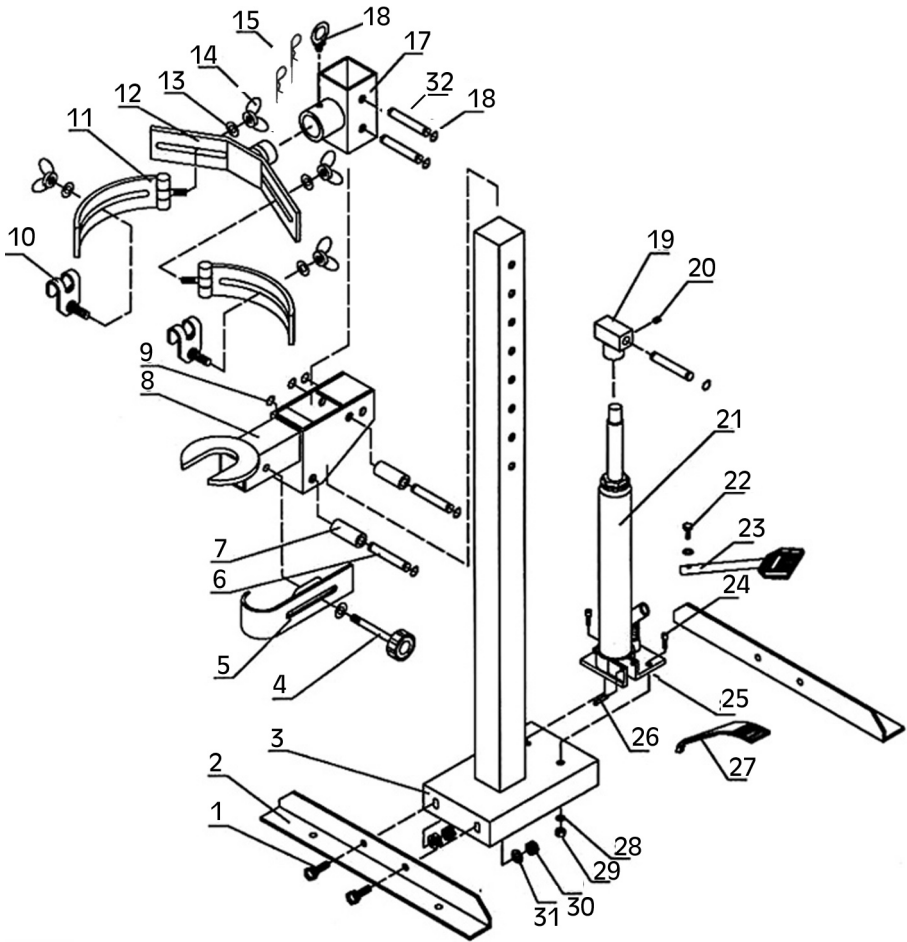
Problem	Probable Cause	Remedy
Pump will not work.	Dirt on seals/worn valve components.	Bleed pump or have unit overhauled with new seals by your dealer.
Pump will not produce pressure. Pump feels hesitant under load. Pump will not lower completely.	Air-lock.	Open the release valve and remove the oil filler plug. Pump the actuating pedal a couple of full strokes and close the release valve. Replace the filler plug.
Pump will not deliver pressure.	Pump has wrong low oil level.	Check oil level by removing the filler plug and topping up to the correct level.
Pump feels hesitant under load.	Pump seal could be worn out.	Have the seal replaced by your Clarke dealer.
Piston will not withdraw completely.	Air-lock.	Release air by removing the filler plug.

### DISPOSAL OF UNWANTED MATERIALS

One of the most damaging sources of environmental pollution is oil products. Never throw away used oil with domestic refuse or flush it down a sink or drain. Collect any oil in a leak proof container and take it to your local waste disposal site.

Should hydraulic components become completely unserviceable and require disposal, draw off the oil into an approved container and dispose of the product and the oil according to local regulations.

# COMPONENT PARTS



## COMPONENT PARTS

NO	DESCRIPTION
1	Bolt
2	Base Support
3	Main Frame
4	Fixing Knob
5	Strut Clasp
6	Locating Pin
7	Sleeve
8	Lower Strut Holder
9	Circlip
10	Spring Clasp
11	Spring Clasp Bracket
12	Spring Clasp Holder
13	Washer
14	Wing Nut
15	R-Clip
16	Screw Ring

NO	DESCRIPTION
17	Upper Strut Support
18	Circlip
19	Saddle
20	Screw
21	Hydraulic Ram Assembly
22	Bolt
23	Actuating Pedal
24	Bolt
25	Ram Base
26	Pin
27	Release Foot Pedal
28	Washer
29	Nut
30	Nut
31	Washer
32	Pin

# DECLARATIONS OF CONFORMITY



Hemnall Street, Epping, Essex CM16 4LG

## DECLARATION OF CONFORMITY

**This is an important document and should be retained.**

**We hereby declare that this product(s) complies with the following statutory requirement(s):**

*Supply of Machinery (Safety) Regulations 2008*

**The following standards have been applied to the product(s):**

*EN 693:2001+A2:2011, EN1494:2000+A1:2008, EN ISO 12100:2010*

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned legislation has been compiled and is available for inspection by the relevant enforcement authorities.

The UKCA mark was first applied in: 2021

**Product Description:** 1 Ton Strut Spring Compressor  
**Model number(s):** SSC1000G  
**Serial / batch Number:** N/A  
**Date of Issue:** 21/07/2021

**Signed:**

J.A. Clarke  
Director

# DECLARATIONS OF CONFORMITY



**Clarke**<sup>®</sup>  
**INTERNATIONAL**

Fitzwilliam Hall, Fitzwilliam Place, Dublin 2

## DECLARATION OF CONFORMITY

**This is an important document and should be retained.**

**We hereby declare that this product(s) complies with the following directive(s):**

*2006/42/EC Machinery Directive*

**The following standards have been applied to the product(s):**

*EN 693:2001+A2:2011, EN1494:2000+A1:2008, EN ISO 12100:2010*

The technical documentation required to demonstrate that the product(s) meet(s) the requirement(s) of the aforementioned directive(s) has been compiled and is available for inspection by the relevant enforcement authorities.

The CE mark was first applied in: 2017

**Product Description:** 1 Ton Strut Spring Compressor  
**Model number(s):** SSC1000G  
**Serial / batch Number:** N/A  
**Date of Issue:** 21/07/2021

**Signed:**

**J.A. Clarke**  
**Director**



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# Clarke®

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## PARTS & SERVICE:

## 0208 988 7400

### Parts Enquiries

[Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)

### Servicing & Technical Enquiries

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SALES: UK 01992 565333 or Export 00 44 (0)1992 565335

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