



**TOOLCRAFT**

**EN | Original Operating Instructions**

**Spring Balancer**

Item No. 2436723 (SB-3000, 3 kg)

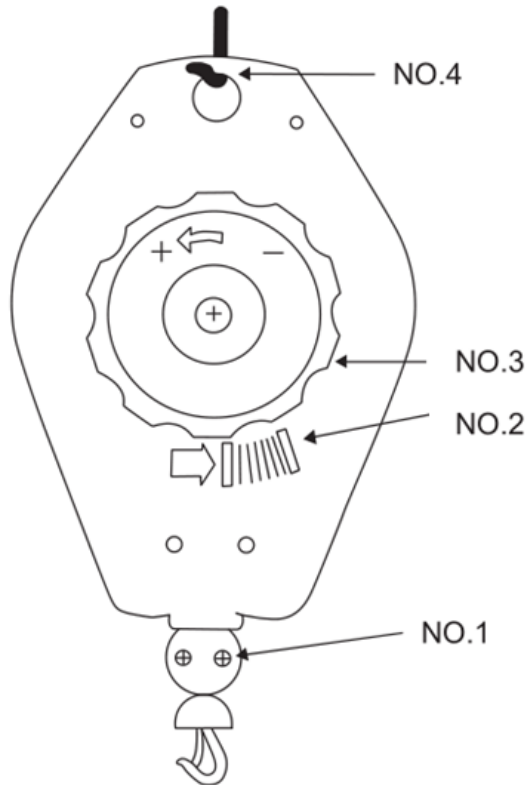
Item No. 2464204 (SB-1200, 2 kg)



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## Components



NO. 1	Stopper
NO. 2	Cable release lever
NO. 3	Adjustment dial
NO. 4	Mounting point

## Operating Instructions for download



Use the link [www.conrad.com/downloads](http://www.conrad.com/downloads) (alternatively scan the QR code) to download the complete operating instructions (or new/current versions if available). Follow the instructions on the web page.

## Intended use


The balancer is designed to balance the weight of tools and utensils in general and is to be used by one operator at a time. The balancer may be used in an assembly line, in single workplaces, in professional and private environments.

## Delivery contents

- 1x spring balancer
- 2x stopper slide with bolts and nuts

## Safety

This manual contains important information that the user must adhere to in order to use the balancer safely. Be sure to have clearly understood all the instructions before using the balancer. Failure to do so could cause injury.

 Always operate, inspect and maintain this balancer in perfect working order in accordance with all regulations pertinent to balancers, tools and workplaces.

## User restrictions

- Do not permit children or people under age to use the balancer.


## Personal safety

- Do not work, transit or linger underneath the balancer.
- When using balancers, always fully and duly comply with the standards and laws in force in the country in which they are used.
- Wear necessary personal protective equipment.


## Environment

- Do not use the balancer in environments with potentially explosive atmospheres.
- Only transport, operate and store within -10 to +40 °C, ≤90 % RH.

## Modifications

-  Do not make any modification to the cable unit and specifically DO NOT SHORTEN the cable.
- Do not remove any labels. Replace any damaged labels.

## Maintenance

-  Operators must never disassemble the balancer. The balancer contains springs that when released in an uncontrolled manner can lead to injury or property damage. Maintenance must only be carried out by skilled, authorized personnel.
- The balancer must be inspected at least once a year by skilled, authorized personnel.
- Check that the cable movement is smooth and that the cable does not make any strange noises.
- Do not lubricate the balancer with flammable or volatile fluids.

## **Installation**

The installation must be carried out by skilled personnel who must comply with the directions outlined in this manual. Incorrect installation could cause injury/damage to people/property.

### **Perform pre-installation checks**

- Check the delivery contents for completeness. Do not install the balancer if parts are missing.
- Check the spring cable's elasticity by pulling the retainer (NO.1) back and forth by 50 cm two (2x) times to ensure the cable extends and retracts. If the cable does not operate normally, do not install the balancer.

### **Assess the suitability of tools**

- Calculate the weight of the tool and accessories (example: air hose).
- Check that the total weight does not exceed the maximum capacity of the balancer as stated in the "Technical data". Do not use the tool if the capacity is exceeded.

### **Determine the installation location**

- Assess the range of the work area to determine the best installation location. To avoid anomalous wear, the load must be applied vertically and in any case the cable must be free to line up with the direction of the load.
- Hang the balancer on a carriage to use it across a wider range.

### **Install the balancer**

- Fix the balancer to the supporting facility using the mounting point (NO. 4). If screw-fixing devices are used to install the balancer, use self-locking nuts, split-pins or other safety systems.
- Connect the safety suspension, using exclusively the supplied standard fittings.

### **Install and adjust the height of the tool**

- Connect the tool to the hook and secure it.
- Firmly hold the tool, then push the cable release lever (NO. 2) fully to the right to release cable.
- Lower the tool to the optimal working height.
- Rotate the adjustment dial (NO. 3) in the direction of the arrow (counterclockwise direction) until the tool is balanced in the air. You can only increase the retaining strength but not lower it. To lower the retaining strength you must release the cable again.
- Fix the stopper (NO. 1) to the cable to set the height from which the tool cannot be further lifted up.

# Operation

## Safety measures

Always follow the applicable accident prevention regulations.

- Always wear protective gear.

It is strictly prohibited to:

- Abandon the load if it is not in a vertical position
- Swing/throw the hanging load to another operator
- Move the load by pulling the cable of the balancer
- Hang loads that are not within the upper and lower ranges of the admissible load-bearing capacity
- Hang more than one tool on the balancer

## Perform pre-operation checks



**Warning:** Visually inspect the balancer on a regular basis (for instance at the beginning of each work shift).

- Specifically, check the state of the suspension and the condition of the hooks and the cable.
- Should the balancer's capacity of supporting a hanging load decrease, this could mean that the spring of the drum is about to break. **DO NOT MODIFY BALANCER ADJUSTMENT TO MAKE IT HOLD UP THE LOAD. CONTACT SKILLED PERSONNEL IN CHARGE OF MAINTENANCE AT ONCE.**

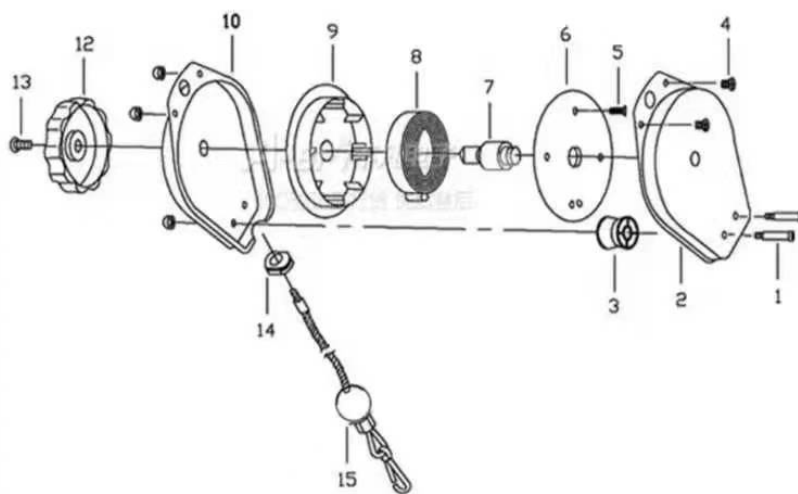
## Operating



Uncontrolled rewinding of cable leads to injury. Always carefully guide the cable to rewind it.

- Grip the tool hanging from the balancer and carry out the required operations. Then accompany the tool until it balances, on the vertical line of the balancer, and release it.
- After using the tool, carefully guide the tool back to its resting position.

## Exploded view



1	Screw	9	Spring Base
2	Front Cover	10	Back Cover
3	Rolling Ball	11	Fixed Spring
4	Screw	12	Adjusting Knob
5	Screw	13	Screw
6	Spring Cover	14	Steel Cable cover
7	Mandrel	15	Cable Retainer

## Disposal

The balancer must be disposed of complying with prevailing rules and regulations at the end of its work life.

## Technical data

Item no.	2464204	2436723
Model no.	SB-1200	SB-3000
Capacity	0.5 - 2.0 kg	1.5 - 3.0 kg
Dimensions	145 x 100 x 22 mm	145 x 100 x 22 mm
Cable Length	1.5 m	3 m
Weight	350 g	400 g
Transporting conditions	-10 to +40 °C, ≤ 90 % RH	-10 to +40 °C, ≤ 90 % RH
Operating conditions	-10 to +40 °C, ≤ 90 % RH	-10 to +40 °C, ≤ 90 % RH
Storage conditions	-10 to +40 °C, ≤ 90 % RH	-10 to +40 °C, ≤ 90 % RH



## Declaration of conformity (DOC)

Conrad Electronic SE, Klaus-Conrad-Straße 1, D-92240 Hirschau hereby declares that this product conforms to the following directive(s):

Model: SB-1200, SB-3000
<b>Machinery Directive 2006/42/EC</b> <ul style="list-style-type: none"><li>• EN ISO 12100:2010</li><li>• EN ISO 11148-4:2012</li></ul>

Click on the following link to read the full text of the EU declaration of conformity:

[www.conrad.com/downloads](http://www.conrad.com/downloads)

Enter the product item number in the search box. You can then download the EU declaration of conformity in the available languages.

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