

BALANCER RANGE



EN User manual

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ORIGINAL INSTRUCTION

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PREFACE


Using this manual


This manual is intended to be used as a work of reference for professional, well trained and authorised users to be able to safely install, use, maintain and repair the product mentioned on the cover of this document.

Pictograms and symbols

The following pictograms and symbols are used in this manual:

	TIP Suggestions and recommendations to simplify carrying out tasks and actions.
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	CAUTION! Procedures, if not carried out with the necessary caution, could damage the product, the workshop or the environment.
--	--

	WARNING! Procedures which, if not carried out with the necessary caution, may damage the product or cause serious personal injury.
--	--

Text indicators

Listings indicated by "-" (hyphen) concern enumerations.
Listings indicated by "•" (bullet point) describe steps to perform.

Service and technical support

For information about specific adjustments, maintenance or repair jobs which are not dealt with in this manual, please contact the supplier of the product. He will always be willing to help you. Make sure you have the following specifications at hand:

- product name
- serial number

These data can be found on the identification plate.

1 INTRODUCTION

1.1 Identification of the product

The identification plate contains, among other things, the following data:

- product name
- serial number

1.2 General description

Balancer to hold and lift the hose of a vehicle exhaust system. The integrated safety chain is to be attached to the system's trolley or mounting device. The BRL types contain an additional ratchet lock.


1.3 Technical specifications

1.3.1 Balancers

	Balancer-200/ 8-17	Balance-300/ 7-14	Balancer-350/ 5-14
Article no.	90120-1011	90100-1011	90110-1011
Wire length	2 m	3 m	3,5 m
Spring tension	8-17 kg	7-14 kg	5-14 kg
Angle from plump line	max. 45°	max. 45°	max. 45°

1.3.2 Balancers with ratchet lock

	Balancer-300/L 7-14	Balancer-300/L 7-17	Balancer-350/L 5-14
Article no.	90105-1011	90106-1011	90115-1011
Wire length	3 m	3 m	3,5 m
Spring tension	7-14 kg	7-17 kg	5-14 kg
Angle from plump line	max. 30°	max. 30°	max. 30°

	Refer to the available product data sheet for detailed product specifications.
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1.4 Ambient conditions

Min. operating temperature: -10°C (14°F)
Nom. operating temperature: 20°C (68°F)
Max. operating temperature: 60°C (140°F)

1.5 Scope of supply

Standard, all balancers are delivered without the balancer locking cable. The balancer locking cable can be ordered separately (art no. 90360-4) or is delivered with following kits:

Description	Art no.
ICCA-100	8175-1011
ICCA-125	30448-1011
ICCA-150	30458-1011
IC-100	30446-1011
SBT-KIT	8175-1011

2 PRODUCT DESCRIPTION

2.1 Components

The product consists of the following main components and elements:

Fig. 2.1

- A spring safety hook Ø 6 mm
- B wire
- C safety chain
- D spring safety hook Ø 8 mm
- E spring tension lock
- F locking cable (for SBT and STR systems only)
- G balancer body including spring
- H balancer wire stop

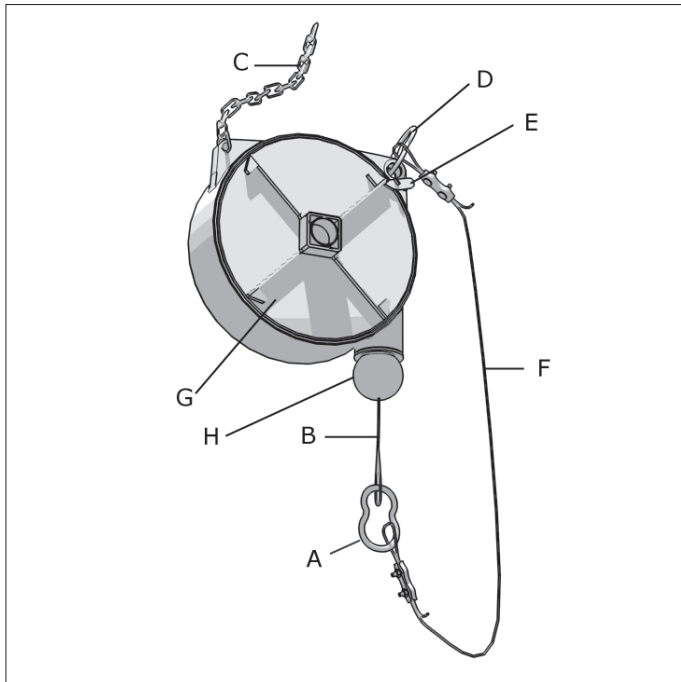


Fig. 2.1 Main components and elements. Showing Balancer-300 with optional balancer locking cable

2.2 Operation

The balancer is used in a vehicle exhaust extraction system to keep the exhaust hose from the ground, thereby minimising the risk of damage to the hose and surroundings. The ratchet lock in the BRL types keeps the hose in a certain position.

3 SAFETY

General

The manufacturer does not accept any liability for damage to the product or personal injury caused by ignoring of the safety instructions in this manual, or by negligence during installation, use, maintenance, and repair of the product mentioned on the cover of this document and any corresponding accessories.

Specific working conditions or used accessories may require additional safety instructions. Immediately contact your supplier if you detect a potential danger when using the product.

The user of the product is always fully responsible for observing the local safety instructions and regulations. Observe all applicable safety instructions and regulations.

User manual

Everyone working on or with the product, must be familiar with the contents of this manual and must strictly observe the instructions therein. The management should instruct the personnel in accordance with the manual and observe all instructions and directions given.

Never change the order of the steps to perform.

Intended use¹

The product has been designed exclusively for holding and lifting a vehicle exhaust hose.

1. "Intended use" as explained in EN-ISO 12100-1 is the use for which the technical product is suited as specified by the manufacturer, inclusive of his directions in the sales brochure. In case of doubt it is the use which can be deduced from the construction, the model and the function of the technical product which is considered normal use. Operating the machine within the limits of its intended use also involves observing the instructions in the user manual.

Using the product for other purposes is considered contrary to its intended use. The manufacturer accepts no liability for any damage or injury resulting from such use. The product has been built in accordance with state-of-the-art standards and recognised safety regulations. Only use this product when in technically perfect condition in accordance with its intended use and the instructions explained in the user manual.

Modifications

Modification of (parts of) the product is not allowed.

Product combinations

If the product is used in combination with other products or machines, the safety instructions in the documentation of these products also apply. Refer to user manual of SBT or STR system.

Installation

- Use sufficient climbing gear and safety guards when working on a higher level than 2 meter (local restrictions may apply).

Use

- Inspect the product and check it for damage. Verify the functioning of the safety features.
- Protect the product against water and humidity.

Service, maintenance and repairs

- Observe the maintenance intervals given in this manual. Overdue maintenance can lead to high costs for repair and revisions and can render the guarantee null and void.
- During service, maintenance and repair jobs, always use Personal Protective Equipment (PPE) to avoid injury. This also applies for persons who enter the work area.
- Safety features which have been removed for service, maintenance or repairs, must be put back immediately after finishing these jobs and it must be checked that they still function properly.
- Use sufficient climbing gear and safety guards when working on a higher level than 2 meter (local restrictions may apply).
- Make sure no vehicle can enter the bay/stations when carrying out service, maintenance or repairs.

4 INSTALLATION

4.1 Tools and requirements

The following tools and requirements are needed to install the product:

- wrench (metric sizes 8-10)
- power cutter (in case of locking cable)
- spanner (jaw size 24)

4.2 Mounting

The balancer can be mounted to the following devices:

- trolley of SBT system
- trolley of STR system
- fixed mounting device

In case of SBT and STR systems, the balancer is provided with a locking cable, that has to be cut to the appropriate length. Refer to the manual of the corresponding system about the required length of the locking cable.

Fig. 4.1

- Prepare the locking cable to the appropriate length.
A = total length.

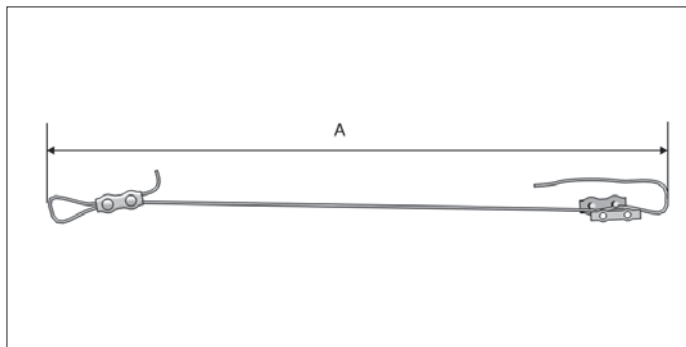


Fig. 4.1 Assembly of locking cable

4.2.1 Mounting to trolley of SBT system

Fig. 4.2

- Mount the balancer.

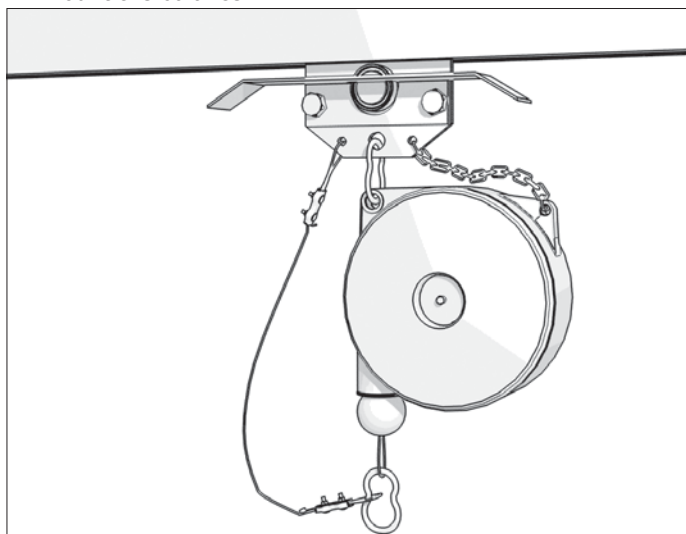


Fig. 4.2 Mounting balancer to SBT system.

4.2.2 Mounting to trolley of STR system

Fig. 4.3

- Mount the balancer.

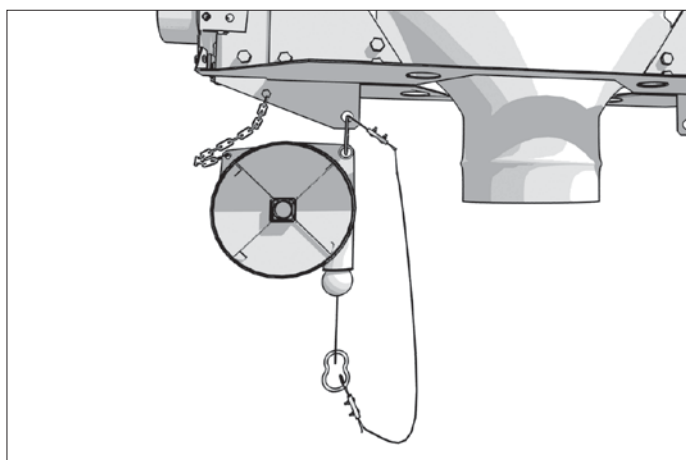


Fig. 4.3 Mounting balancer to STR system.

4.2.3 Mounting to a fixed mounting device

The fixed mounting devices have no provision to mount the safety chain. Instead it can be mounted to the wall or ceiling construction, e.g. by means of a mounting plate.

- Mount the balancer to the mounting device in question.
- If desired, attach the safety chain to the wall or ceiling construction.



WARNING!

Make sure the safety chain connection is strong enough to hold the weight of the entire configuration.

4.3 Functioning and setting

The balancer is factory-wise delivered at a pre-tension of 3 revolutions. It needs to be adjusted to its final tension when the entire installation is ready. Depending on the installation, there are two possibilities:

- pre-tension is OK
- spring tension needs to be increased

- Check if the balancer is capable of holding and lifting the connected hose. If not, increase the spring tension as follows.

Fig. 4.4

- Fasten the balancer in e.g. a benchvice.
- Turn casing cap (A) max. 0,5 revolutions anti-clockwise (direction +) using a spanner.



WARNING

Do **not** increase spring tension more than 0,5 revolution to avoid serious damage to the balancer. Except for the BR-200 / 8-17 which can be increased up to 1 revolution.

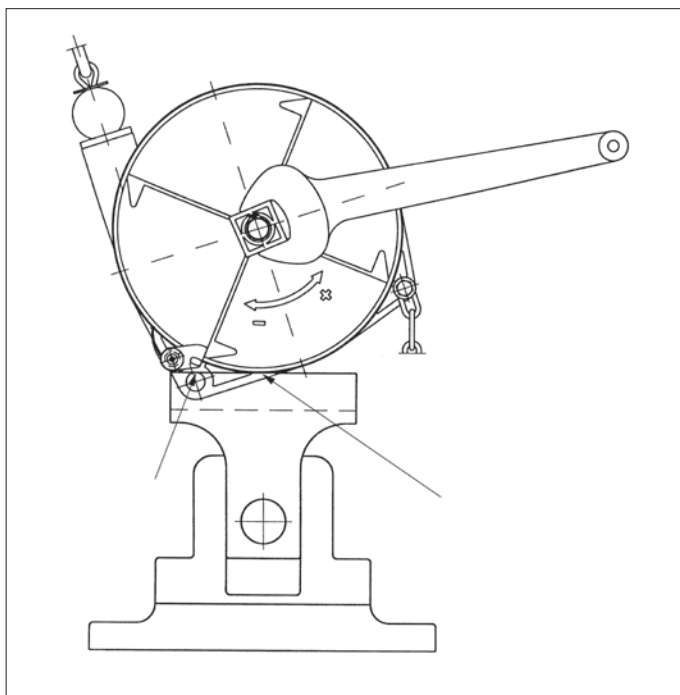


Fig. 4.4 Spring tension adjustment

5 MAINTENANCE

5.1 Periodic maintenance

The product has been designed to function without problems for a long time with a minimum of maintenance. In order to guarantee this some simple, regular maintenance activities are required which are described in this chapter.

The maintenance activities in the table below can be carried out by the user.

Component	Action	Frequency: every 6 months
Housing	Check for cracks and loose screws.	yes
Wire	Check wire for visible damage, e.g. broken threads. Replace if necessary. Refer to section 6.1.	yes

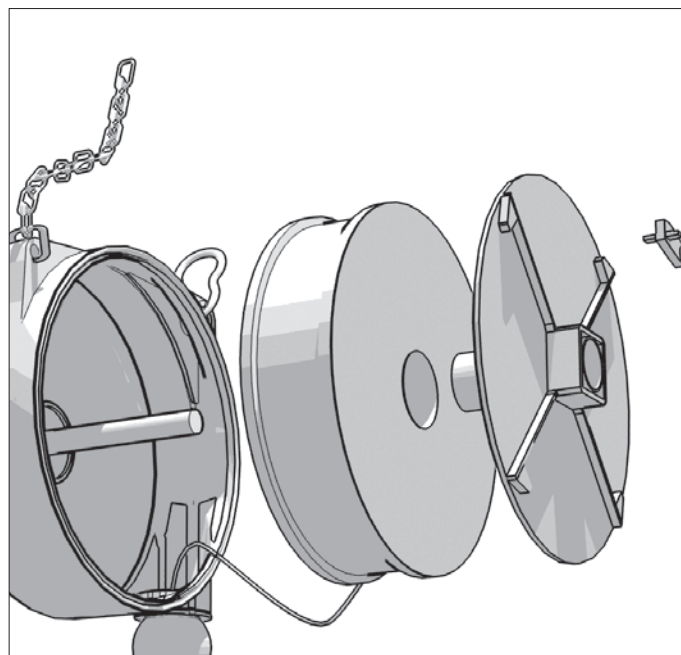


Fig. 6.1 Replacement of the wire

6 TROUBLESHOOTING

If the product does not function (correctly), consult the checklist below to see if you can remedy the error yourself. Should this not be possible, contact your supplier.

	WARNING! Always fully unwind the spring tension by turning the casing cap clockwise until the wire gets loose, before carrying out the activities below.
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Symptom	Problem	Possible cause	Solution
Wire is not retracted when nozzle is disconnected.	Extraction hose is not lifted from the floor.	Spring tension too low.	Increase spring tension by max. 0,5 revolution. Refer to section 4.3 (Functioning and setting).
		Spring is broken.	Replace spring.
Vehicle exhaust system disconnects too quick from tail pipe.	Exhaust fumes in the bay/ station.	Spring tension too high.	Decrease spring tension by one "quarter click".
The kickback of the hose drop after disconnection is too powerful.	Balancer might cause damage to the hose or the surroundings.	Spring tension too high.	Decrease spring tension by one "quarter click".

6.1 Wire replacement

	WARNING! Never open the spring cassette to avoid personal injury.
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Refer to Fig. 6.1 for replacement of wire.

7 SPARE PARTS

The following spare parts are available for the product (refer to Fig. 2.1 on page 3).

Ref	Article no.	Description
B	900931A5020	Wire
D	900931G5024	Spring Safety hook Ø 6 mm
D	900931G5023	Spring Safety hook Ø 8 mm
E	900931P5007	Tension Lock

8 DISPOSAL

After life of the product, dispose it of in accordance with federal, state or local regulations.

CE DECLARATION

CE declaration of conformity for machinery

We, Plymovent, Kopparbergsgatan 2 SE-214 44 Malmö,
Sweden, herewith declare, on our own responsibility, that the
product(s):

- Balancer

which this declaration refers to, is/are in accordance with the
conditions of the following Directive:

- 2006/42/EC

and is/are in conformity with the following harmonized
standard(s) and/or other such normative documents +
amendments, if any:

- DIN 15112

Malmö, Sweden, November 1, 2010



C.J.M. Knijn
Chief Operations Officer

