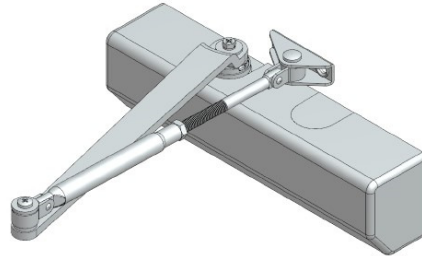


Fitting instructions - Ryobi D-2550BC door closer



Introduction

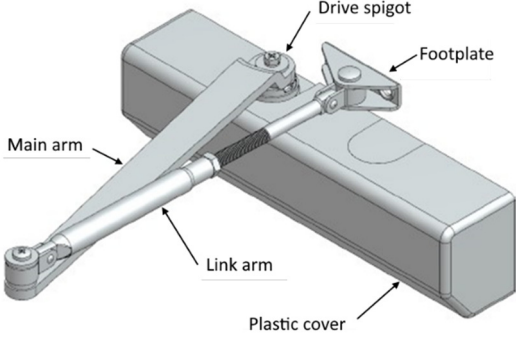

This document describes procedure for fitting of Ryobi closer D-2550BC (Stannah part number 513352) as part of a new lift installation. Required steps for fitting to steel frame door & wooden fire door are described as Section A & Section B following, respectively.



Note: Do not make any alterations to door closer adjustment screws until directed in the instructions below; this is important to ensure that the correct closing & opening forces are achieved without the need to make measurements.

This document is provided as constituent of kit boxes 6102507 & 6102509.

Images 1 & 2 show closer & nomenclature of parts referred to in following sections.

	
<p>1: Ryobi door closer D-2550BC parts nomenclature</p>	<p>2: Closer (without Plastic cover) fitted to steel frame door, left hand slam</p>


Section A: Retro fit of Ryobi D-2550BC to steel frame door

Steps to fit the new closer are described in generic terms in the instruction leaflet provided with the closer unit. However, all details are not explicit, so a full description of the process to be followed is described following.

1. Positions of door & frame for fixing of the Closer body & footplate are predrilled & fitted with nutserts at the factory, so fitting is straightforward, using M5 screws provided with the closer.
2. Proceed to fit the closer, noting these details:
 - Closer body to be positioned on the door with the Drive spigot of the closer closest to the door hinge, & with the Main arm set at 90 deg to the door face – Image 2 illustrates this for a door with LH slam
 - orientation of the footplate - to be positioned in the “standard position” orientation as described in the fitting instructions, & an extract of which is shown as Image 3
 - closer Link arm (arm which has its length adjustable) to be set such that distance between its pivot centres is 252mm

3. Adjust setting screws as indicated in the table below; by means of testing these were found to give optimum performance, balancing minimal opening force & still achieving reliable closing action. *Do not* make any further adjustments, at this stage. For ease of reference, identification of the setting screws are shown in Images 4 to 6 (all images are extracts from the fitting instructions).

Power (spring adjustment)	Latch speed	Door speed	Back check
4 turns ACW	1 turn ACW	none	2.1/2 turns ACW



Note: The reason requiring use of this closer is that opening force on the existing unit has been shown to exceed the maximum permitted value of 40N described in EN81-41; closing force (& consequently opening force) is controlled primarily by the “power” adjustment & so to achieve the required value, bearing in mind installers are not equipped to measure the opening force, it is important that the specified screw adjustments only are set.

	<p>SPRING ADJUSTING SCREW</p>
<p>3: Footplate orientation</p>	<p>4: "Power" adjustment screw</p>

<p>VALVE (1) CONTROLS DOOR SPEED</p> <p>VALVE (2) CONTROLS LATCHING SPEED</p>	<p>THIS VALVE CONTROLS BACKCHECK</p>
<p>5: speed adjustment screws</p>	<p>6: Back check adjustment screw</p>

4. Check for satisfactory operation: door should close smoothly & reliably. If for any reason door operation is not satisfactory then as a last resort, minor adjustment of speed setting screws (Image 5) may be attempted. Under no circumstance shall any further adjustment be made to the power setting. If any adjustment is undertaken to speed screws, it is important to keep count of adjustments to each screw, & document them on the test sheet.

7. *Do not* fit the Plastic cover supplied with the door closer; this item should be discarded together with unused fixings.

8. Retrofitting is now complete.

Section B: Retro fit of Ryobi D-2550BC to wooden fire door

Steps to fit the new closer are described in generic terms in the instruction leaflet provided with the closer unit. However, all details are not explicit, so a full description of the process to be followed is described following.

1. Positions on door & frame for fixing of the Closer body & footplate are predrilled, & for the Footplate in the door frame, also fitted with nutserts at the factory. Installation of the closer is therefore straightforward, using fixings provided with the closer.

2. Proceed to fit the closer, noting these details:

- Closer body to be positioned on the door with the Drive spigot of the closer closest to the door hinge, & with the Main arm set at 90 deg to the door face – Image 2 illustrates this for a door with LH slam (albeit on a steel door, but mounting arrangement is the same)
- orientation of the footplate - to be positioned in the “standard position” orientation as described in the fitting instructions, & an extract of which is shown as Image 3
- to fit closer body to the door leaf, use 5mm diameter self tapping screws provided with the closer. Fit footplate to nutserted holes on the door frame using M5 screws, again provided with the closer
- closer Link arm (arm which has its length adjustable) to be set such that distance between its pivot centres is 252mm

3. Adjust setting screws as indicated in the table below; by means of testing these were found to give optimum performance, balancing minimal opening force & still achieving reliable closing action. *Do not* make any further adjustments, at this stage. For ease of reference, identification of the setting screws are shown in Images 4 to 6 (all images are extracts from the fitting instructions).

Power (spring adjustment)	Latch speed	Door speed	Back check
4 turns ACW	1 turn ACW	none	2.1/2 turns ACW



Note: The reason requiring use of this closer is that opening force on the existing unit has been shown to exceed the maximum permitted value of 40N described in EN81-41; closing force (& consequently opening force) is controlled primarily by the “power” adjustment & so to achieve the required value, bearing in mind installers are not equipped to measure the opening force, it is important that the specified screw adjustments only are set.

4. Check for satisfactory operation: door should close smoothly & reliably. If for any reason door operation is not satisfactory then as a last resort, minor adjustment of speed setting screws (Image 5) may be attempted. Under no circumstance shall any further adjustment be made to the power setting. If any adjustment is undertaken to speed screws, it is important to keep count of adjustments to each screw, & document them on the test sheet.
5. Fit the plastic cover supplied with the door closer over the closer body.
6. Retrofitting is now complete.

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Modification history

Rev	Issue Date	Name	Changes
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