CHAMBERLAIN®
GRIFCO

RELEASE GOVERNOR

Universal Installation & Users Manual

Contents:

Introduction	Page 2
Identifying your Governor Kit	
Installation	Page 3
Getting Started / Setup	Page 4
Operation	
Maintenance	Page5
Warranty	Page 8

Introduction

Congratulations on your purchase of the Grifco **RELEASE GOVERNOR** emergency descent unit. The release governor provides safety and reassurance to people and objects which pass beneath a vertically operating industrial door. By controlling the descent speed of the selected door, the release governor ensures that potential failure of the drive chain or gear box will not cause an uncontrolled descent of the door.

Fitted with an external release system, the release governor can be connected to a release cable, allowing manual descent of the door by the user.

When installed correctly the governor will apply a braking force to the door only when it exceeds a safe speed, resulting in a smooth, slow descent at all times. During normal operation the governor does not apply a braking force and allows the door operate unhindered*. The speed at which the governor will engage, and maximum velocity of the door, can be adjusted to suit the requirements of the user

*Due to friction and inertial forces within the governor a constant restricting torque of no more than 30 Nm will exist.

Identifying your Governor kit

Installation

The governor is a flag mounted unit with both an input and output sprocket. Care should be taken when fixing the mounting plate to assure that the appropriate sprockets are inline with both the door and the operator sprocket. Once the position of the governor has been chosen, the mounting plate can be secured.

The input sprocket on the governor is a 10B 23 tooth and is fixed on the shaft. When being run by the operator, the governor requires a shaft velocity of between 25 – 32 RPM. If a 1:1 ratio between the governor and the operator does not achieve this, then the sprocket on the operator should be changed so that it does.

The output sprocket is connected to the door. A ratio of 1:4 from the release governor to the door is recommended. An example of the connected governor is show below.

The release arm must be pulled in when being driven by the operator. This is done by fitting a cable via a pulley system to a handle easily accessed by the user. When the cable is released, the input sprocket is free to spin on the governor shaft and the door descends at a safe, controlled speed. The release arm requires a stroke of approximately 40mm

The governor must remain upright (the base of the Brake Cover facing downwards). Once the chains are fitted between the four sprockets, and grub screws located on the sprocket of the governor and operator are tightened, the braking force of the governor is ready to be adjusted.

Getting Started / Setup

If using the governor for the first time, transferring the governor to a different door or varying the door descent velocity and brake engage speed, calibration may be required. To determine whether calibration is required a door failure simulation must be carried out following installation.

When simulating a door failure, drive the door to its fully open position while the release arm is engaged. Making sure the area beneath the door cleared, disengage the release arm allowing the door to fall with only the governor restricting its descent.

If the door does not descend at the desired speed calibration is required. To calibrate the governor the brake enclosure must be removed. This is done by removing the three screws, located at the base of the enclosure, from the brake cover flange. By releasing the nut at the end of each weight leg and placing the semi-circular weights in new positions along the weight arms, different door velocity characteristics can be achieved. Additional weights can be purchased to increase the range of obtainable engage and descent velocities.

Note: All weights must be placed so that each has an opposing weight at the same height on the opposite weight leg.

Alternative weight configurations

Operation

Once correctly installed and calibrated the governor is totally self-reliant, requiring no adjustment and minimal interaction with the user. To manually release the door, tension to the cable holding the release arm is removed and the door will close at a slow controlled speed

NOTE: Depending on the method of limit setting, the limits for the doors open and close position may need to be reset.

Maintenance

As a safety precaution a maintenance assessment should be performed every 6 months (or 400 cycles if reached within 6 months) to ensure correct operation of the governor.

Procedure:

1. Remove chain between the governor and door drum

2. Remove brake enclosure (the governor may need to be removed from the mounting plate to achieve this and the following steps)

3. Rotate the pressure plate of the governor so that the edge of one of the rectangular pressure plate slots passes an edge of one of the semi circular holes in the enclosure flange and lines up with the right edge of the semi circular hole (refer to Figure. 2 on following page for resulting position)

Figure 1.

Figure 2. Position of Pressure Plate after completion of step 3

4. Drive the pressure plate very slowly (the distance the pressure plate moves should be only a few millimetres) in the reverse direction until resistance is felt. At this point any further rotation of the pressure plate will cause rotation in the output shaft and invalidate the procedure

Figure 3.

5. If the edge of the pressure plate hole that was originally aligned with the right edge of the semi circular hole of the brake cover flange has moved past the left edge of the semi circular hole then the governor must has excessive wear and should be replaced or serviced.

Figure 4. Position at which further anti-clockwise rotation will cause rotation of governor shaft

Figure 5. Position at which further anti-clockwise rotation will cause rotation of governor shaft

WARRANTY / GUARANTEE

Chamberlain Australia Pty Ltd herein referred to as "The Company"

(a) The Company shall guarantee the goods for a period of two years from the date of invoice against any defects in construction or operation arising solely from faulty design, materials or workmanship subject to the following clauses.

(b) The Company shall at its option, repair, modify or replace defective parts or units at its own expense and within a reasonable time but the Company shall not unless otherwise agreed in writing be liable for costs associated with removal, replacement, transport or travelling expenses incurred by the Purchaser in obtaining the goods and returning them to the Company.

(c) The Company does not guarantee the goods where:-

(I) the defect rises from materials supplied by the Purchaser or a design requested by the purchaser; or

(ii) the defect arises from ordinary wear and tear, neglect or misuse by the Purchaser, accident, lack of care, insufficient maintenance, incorrect installation or improper use of the goods; or

(iii) the defect arises from force majeure; or

(iv) the Purchaser has in any way modified or repaired the goods without the Company's prior written consent; or

(v) the Purchaser has not complied with any written or oral instructions concerning the operation and maintenance of the goods; or

(vi) the Purchaser is in default in the observance or performance of any other provisions of the contract; or

(vii) The Grifco electric motors are used in conjunction with controls other than those assembled and supplied by the Company.

(d) Where warranty is approved for goods in a used condition, such goods will be repaired or replaced and returned to the purchaser as the Company sees fit. Refunds or credits will only be considered for goods not used and in new, undamaged condition.

(e) The Company's liability under this guarantee will be strictly limited to repairing or replacing a defective product at the Company's premises, as it may elect.

(f) The provision of sub-clauses (a) and (b) are stipulated for the benefit of the Purchaser only and are not intended for the benefit of any third party.

(g) Save for sub-clauses (a) and (b) the Company does not give any warranty or guarantee or make representations whatever in respect of the goods or the fitness of the goods or any part thereof or any particular purposes (whether or not that purpose is known to the Company).

Chamberlain Australia Pty Ltd

15 Dell Rd West Gosford
NSW 2250
Australia
Ph. +61 (02) 43233877
Fax. +61 (02) 43233882

www.grifco.com.au
sales@grifco.com.au
technical@grifco.com.au