INSTALLATION INSTRUCTIONS. ELECTRO-HYDRAULIC DOOR CLOSER.

THIS SIDE FOR PUSH SIDE INSTALLATION [FIG 66 PARALLEL ARM].

INTRODUCTION

Thank you for buying our Electro-Hydraulic Door Closer. Before you start to fit the device please read the following important points.

- Check the door weight before fitting as this decides the power size the door will be fitted as (Ref Table 1).
 The door should be checked to ensure correct hanging and freedom from binding.
- The product must have a constant 24V DC ±10% (at 100mA ±10%) power supply to function correctly.

This device <u>must</u> be fitted by a competent person.
 All measurements are in millimeters.

Follow the steps below to fit the unit. If you have a problem at any point, contact us on +44 (0)1506 467 477

Use instructions on this page for push side [Fig 66 Parallel Arm] Hold Open closer installation. For pull side [Fig 1] Hold Open installation use instructions on page: For 'Swing Free' installation please use supplied 'Swing Free' leaflet when instructed to in these instructions.

POWER SIZE	MAX DOOR WEIGHT
3	60kg
4	80kg

TOOLS REQUIRED

- Bradawl.
- Pozi Head Screwdrivers Drill with 3mm Bit. Flat Head Screwdrivers
- 10mm Spanner. - Masking Tape.
- Step Ladders

CERTIFIRE CONDITIONS OF USE (REF CF5023)

9000 Series door closers are approved for use with either latched or unlatched doors on

- Timber doors in timber frames without perimeter seals for periods of up to 20 minutes Intumescent sealed in timber frames (ITT) for periods of 20 to 120 minutes in door assemblies consisting of either solid timber or timber
- faced and edged doors (Types C, H & I-O)

 Intumescent sealed in metal frames (ITM30) for periods of 30 minutes in door assemblies consisting of either solid timber or timber faced and edged doors (Types C, H & I-O).



Boss Door Controls Ltd 3 & 4 Rutherford Square **Brucefield Industry Park** Livingston, West Lothian EH54 9BU, United Kingdom

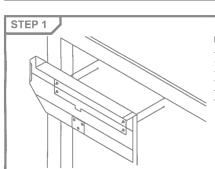
2015

TS7.004

1121-CPR-AE0005

EN 1155:1997: + A1:2002

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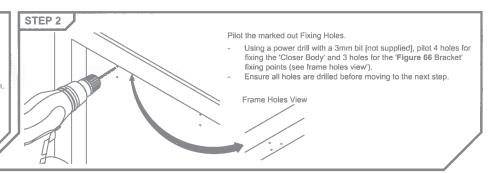
- Use the template supplied in the box
- Fold the template where indicated.
- Stick template to the door with masking tape [not supplied]. Use a bradawl [not supplied] to mark holes required.
- Ensure you are fitting the closer in the correct opening orientation
- Ensure you are on the Figure 66 side of the template

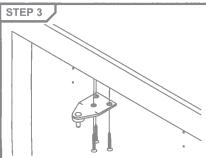




Assembly View

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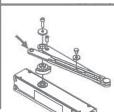




Fix the 'Figure 66 Bracket'.

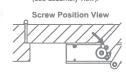
Fix the 'Figure 66 Bracket' to the door frame with 3 x 'Screw B'





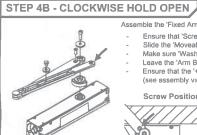
STEP 4A - ANTI-CLOCKWISE HOLD OPEN

- Ensure that 'Screw E' is in the correct hole (see arrow on position view). Slide the 'Moveable Arm' (arrow on diagram) into the larger 'Fixed Arm Assembly' Make sure 'Washer D' is between the 'Arm Bolt' and the 'Fixed Arm Assembly'
- Leave the 'Arm Bolt' loose as this will aid installation in 'Step 5 & 6' Ensure that the '+' symbols on the closer pivot and 'Arm Adaptor' align correctly



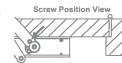
Important Note:

If 'Swing Free' is required please use the included leaflet in conjunction with these instructions to assemble the 'Main Arm Assembly' at this point.



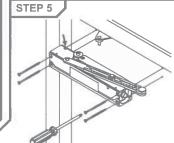
Assemble the 'Fixed Arm Assembly' in clockwise 'Hold Open' Ensure that 'Screw E' is in the correct hole (see arrow on position view)

- Slide the 'Moveable Arm' (arrow on diagram) into the larger 'Fixed Arm Assembly' Make sure 'Washer D' is between the 'Arm Bolt' and the 'Fixed Arm Assembly'. Leave the 'Arm Bolt' loose as this will aid installation in 'Step 5 & 6'. Ensure that the '+' symbols on the closer pivot and 'Arm Adaptor' align correctly
- (see assembly view)



Important Note:

If 'Swing Free' is required please use the included leaflet in conjunction with these instructions to assemble the 'Main Arm Assembly' at this point



Fix the 'Closer Body' to the door and 'Figure 66 Bracket'

- To aid installation, turn the speed valve clockwise to close (see speed valve view). Do not over tighten. Move the "Fixed Arm Assembly' so that it is aligned with the centerline of the "Closer Body" (see Step 6 "Arm Position View").
- Ensure that 2 x 'Screw G' are fixed into the correct holes
- Ensure that 2 x Screw G are trace into the correct noise required (arrow on diagram) before fixing to the door Fix the 'Closer Body' to the door with 4 x 'Screw A' Ensure the 'Closer Body' is flush & level on the door. Fix the 'Fixed Arm Assembly' to the 'Figure 66 Bracket' using the 'Capped Circlip' (see assembly view).

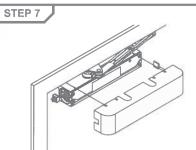




Pre-load the door closer

- Ensure the 'Fixed Arm Assembly' is still aligned with the 'Closer Body' and not touching/pressing on the door face (see arm position view)
- Hold in place by tightening the 'Arm Bolt' with a 10mm spanner [not supplied] Ensure the 'Arm Bolt' is tightened firmly so the 'Moveable Arm' cannot move.
- Then turn the speed valve anti-clockwise so that the door closes at the desirable speed





Fix the Cover to the body

Ensure the 'Cover Grommet' (see assembly view) and 'Base Connector' are pushed into the 'Radius Cover'. Slide the 'Radius Cover' over the body locating onto both 'Screw G'

Turn Inner most speed valve clockwise.

Tighten both 'Screw G' so that the cover does not me



Please be aware that a Square Cover is available for this product.

For more informatio +44 (0)1543 460 040.

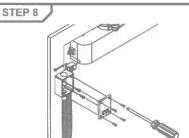


Assembly View

Assembly View

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Speed Valve View



Fitting the 'Loop Assembly'.

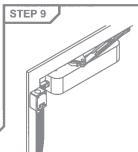
- Remove the 'Switch Box' screws and adapt the box (see assembly
- view) to suit the 24V DC (at 100mA ±10%) power supply. Connect the power supply and fix the 'Switch Box' to the wall using
- 2 x 'Screw F' (see assembly view).
- Ensure the location of the 'Switch Box' does not hinder operation

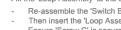
Assembly View



Important Note:

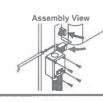
Please ensure the power supply for the 'Loop Assembly' is fitted by a Qualified Electrician.





Fix the 'Loop Assembly' to the closer.

- Re-assemble the 'Switch Box' ensuring the power is connected correctly. Then insert the 'Loop Assembly' into the 'Base Connector' (arrows on diagram). Ensure 'Screw C' is securely in place.



For any other information on Maintenance. Testing or closer Adjustment please see the bottom of this page.

For any other questions please call: +44 (0)1506 467 477.

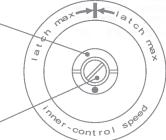
CLOSER ADJUSTMENT

Please follow below instructions to change the latch & closing speed of your door closer. Note that adjustments can be made with the tool (See below) provided within the door closer box.

LATCH SPEED (OUTER CONTROL)

"OFF" Position - Is as shown on diagram. "ON" Position - Rotate 1/2 a turn towards 'latch'

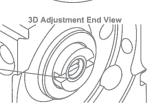




CLOSING SPEED (INNER CONTROL)

Rotate clockwise to reduce closing speed (Note: Do NOT open valve past leading 'edge of outer ring')





MAINTENANCE AND TESTING

Once the door closer has been installed and adjusted no further maintenance should be necessary.

- The door closes freely into its frame from any angle without slamming.
- Excessive force is not required by the user to open the door.

- All fixing screws and hexagon bolt are tight. **TESTING (WITHOUT POWER)**

- Ensure the switch is on the 'OFF' position (or symbol).
- 2. Open the door to its maximum opening angle and release. Door should close fully into the door frame and overcome the latch.
- 3. Open the door and rest the latch bolt on the striker plate. Release the door. The door closer should have sufficient power to latch the door closed.

Any failure to close the door into the frame should be investigated. It may indicate that the door closer is undersized or that excessive force is required to close the door due to distortion or misalignment

TESTING (WITH POWER)

- Ensure the switch is in the 'ON' position (or symbol).
- 2. Open the door to at least 65° and ensure that the door holds open
- 3. Gently pull the door to check that the door can be manually pulled off hold.
 4. Open the door to the hold position and test the release by activating the alarm system (where applicable) or other emergency power shut down mechanism.

WARNING:

This door closer unit contains a powerful spring which is inserted into the body under pressure. Under NO circumstances should attempts be made to dismantle the door closer. Attempts to do so could cause injury.

INSTALLATION INSTRUCTIONS. ELECTRO-HYDRAULIC DOOR CLOSER. THIS SIDE FOR PULL SIDE INSTALLATION [FIG 1].

INTRODUCTION

Thank you for buying our Electro-Hydraulic Door Closer

Before you start to fit the device please read the following important points

- Check the door weight before fitting as this decides the power size the door will be fitted as (Ref Table 1).
 The door should be checked to ensure correct hanging and freedom from binding.
- The product must have a constant 24V DC ±10% (at 100mA ±10%) power supply to function correctly.
- This device <u>must</u> be fitted by a competent person.

· All measurements are in millimeters.

Follow the steps below to fit the unit. If you have a problem at any point, contact us on +44 (0)1506 467 477. Use instructions on this page for pull side [Fig 1] Hold Open closer installation.

For push side [Fig 66 Parallel Arm] Hold Open installation use instructions on page 2. For 'Swing Free' installation please use supplied 'Swing Free' leaflet when instructed to in these instructions.

POWER SIZE	MAX DOOR WEIGHT
3	60kg
4	80kg

TOOLS REQUIRED

- Pozi Head Screwdrivers
 Flat Head Screwdrivers. - Bradawl. - Drill with 3mm Bit.
- 10mm Spanner. Masking Tape.
 - Step Ladders.

CERTIFIRE CONDITIONS OF USE (REF CF5023)

9000 Series door closers are approved for use with either latched or unlatched doors on:

- Timber doors in timber frames without perimeter seals for periods of up to 20 minutes
- Intumescent sealed in timber frames (ITT) for periods of 20 to 120 minutes in door assemblies consisting of either solid timber or timber faced and edged doors (Types C, H & I-O)
 Intumescent sealed in metal frames (ITM30) for periods of 30 minutes in door assemblies consisting of either solid timber or timber faced and edged doors (Types C, H & I-O).

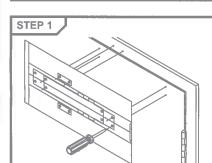
Boss Door Controls Ltd 3 & 4 Rutherford Square **Brucefield Industry Park** Livingston, West Lothian EH54 9BU, United Kingdom

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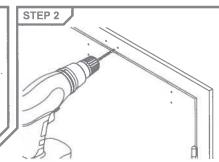


Fit Template and mark the Fixing Holes.

- Use the template supplied in the box.
- Stick template to the door with masking tape [not supplied]
 Use a bradawl [not supplied] to mark holes required.
 Ensure you are fitting the closer in the correct opening orientation.
- Ensure you are on the Figure 1 side and that you mark the correct power size holes as indicated on the template.

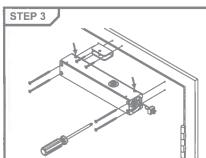






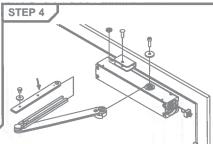
Pilot the marked out Fixing Holes.

- Using a power drill with a 3mm bit [not supplied], pilot 4 holes for fixing the closer body and 2 holes for the Figure 1 bracket fixing points
- Ensure all holes are drilled before moving to the next step.



Fix the 'Closer Body' and 'Figure 1 Bracket'

- Fix the 'Closer Body' to the door with 4 x 'Screw A'
- Fix the 'Figure 1 Bracket' to the door frame with 2 x 'Screw B'.
- Ensure that 2 x 'Screw G' are fixed into the locations showr (arrows on diagram) before fixing to door.
- Check the body is level and that the 'Figure 1 Bracket' is fitted to a flat surface (this may require recessing bracket into the door



Assemble the 'Main Arm Assembly' in 'Hold Open'

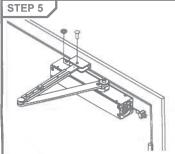
- Slide the 'Moveable Arm' (arrow on diagram) into the larger 'Fixed Arm Assembly' (see assembly view).

 Make sure 'Washer D' is between the 'Arm Bolt' and 'Fixed Arm
- Leave the 'Arm Bolt' loose as this will aid installation in 'Step 5'.



Important Note:

If 'Swing Free' is required use the included leaflet in conjunction with these instructions to assemble the 'Main Arm Assembly' at this point.



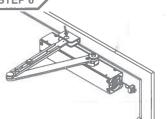
Fix the 'Fixed Arm Assembly' in.

- Ensure the 'Fixed Arm Assembly' is in the correct orientation. The 'O' should match up on all parts (see diagram below).

 Ensure 'Washer C' sits between the 'Fixed Arm Assembly' and 'Screw D'
- (arrows on diagram)
- cannot move





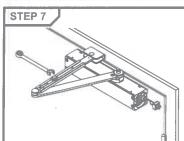


Fix the 'Moveable Arm' to the bracket.

- Press the 'Pivot Pin' (arrow on diagram) through the bracket and 'Moveable Arm'.

 Take the 'Capped Circlip' and press it onto the
- end of the 'Pivot Pin' (see assembly view).
- Ensure the 'Moveable Arm' is securely in place and cannot come free.





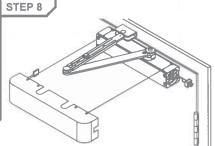
- Apply pressure to the 'Fixed Arm Assembly' (arrows on diagram) so that the 'Moveable Arm' is now at 90° to the door face.

 Hold in place by tightening the 'Arm Bolt' with a 10mm spanner [not supplied].
- Ensure bolt is tightened firmly so the 'Moveable Arm' cannot move freely





WITH PRE-LOAD



Fix the Cover to the body

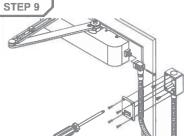
- Ensure the 'Cover Grommet' (see assembly view) and 'Base Connector' are pushed into the 'Radius Cover'.
- Slide the 'Radius Cover' over the body locating onto both 'Screw G'
- Tighten both 'Screw G' so that the cover does not move



Please be aware that a Square Cover is available for this product.

For more information contact +44 (0)1543 460 040.





Fitting the 'Loop Assembly'

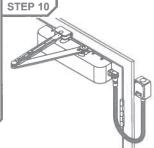
- Remove the 'Switch Box' screws and adapt the box (see assembly
- view) to suit the 24V DC (at 100mA ±10%) power supply
 Connect the power supply and fix the 'Switch Box' to the wall using
- 2 x 'Screw F' (see assembly view).
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Assembly View



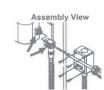
Important Note:

Please ensure the power supply for the 'Loop Assembly' is fitted by a Qualified Electrician.



Fix the 'Loop Assembly' to the closer

- Re-assemble the 'Switch Box' ensuring the power is connected correctly Then insert the 'Loop Assembly' into the 'Base Connector' (arrows on diagram).
- Ensure 'Screw C' is securely in place.



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For any other questions please call: +44 (0)1506 467 477

CLOSER ADJUSTMENT

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LATCH SPEED (OUTER CONTROL) "OFF" Position - Is as shown on diagram

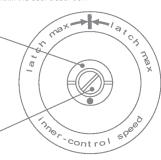
"ON" Position - Rotate 1/2 a turn towards 'latch'



CLOSING SPEED (INNER CONTROL)

Rotate clockwise to reduce closing speed (Note: Do NOT open valve past leading 'edge of outer ring').









MAINTENANCE AND TESTING

Once the door closer has been installed and adjusted no further maintenance should be necessary. However, an annual documented check must ensure that:

- The door closes freely into its frame from any angle without slamming
- Excessive force is not required by the user to open the door. All fixing screws and hexagon bolt are tight.

TESTING (WITHOUT POWER)

- Ensure the switch is on the 'OFF' position (or symbol).
- 2. Open the door to its maximum opening angle and release. Door should close fully into the door frame and overcome the latch.
- 3. Open the door and rest the latch bolt on the striker plate. Release the door. The door closer should have sufficient power to latch the door closed.

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- 3. Gently pull the door to check that the door can be manually pulled off hold. 4. Open the door to the hold position and test the release by activating the alarm system (where

applicable) or other emergency power shut down mechanism. WARNING:

This door closer unit contains a powerful spring which is inserted into the body under pressure. Under NO circumstances should attempts be made to dismantle the door closer. Attempts to do so could cause injury.