Read all instructions before starting installation

**PACK CONTENTS**

- Pack 1 (51A4)
  - x3 Raw plugs
  - x4 x6 x2
  - x2 x5 x2
- Pack 2 (FIX-DUMMY)
  - x4 x6 x2
  - x4 x5

**IMPORTANT:** This closer should be installed by a competent installer who must pass these instructions on to the site or maintenance manager once the closer has been satisfactorily installed. No responsibility can be accepted by the manufacturer if these installation instructions are disregarded.

**Note:**
1. For Side Load and End Load (AFT) installation, please refer to page 2.
2. The thread of all fixings should be applied with Loctite 222 or similar and securely fastened.

**DOOR ADJUSTMENTS**

1. Closing range
2. Latching range

**CLOSED SPEED ADJUSTMENT**

- Turn clockwise for slower speed, anti-clockwise for faster speed

**HOLD OPEN OPTIONS**

- EN 2
- EN 3
- EN 4

Factory presetting size: EN2. A full turn needed for each strength setting.

**DIFFERENT STYLES OF TRANSOM CLOSER**

**POWER ADJUSTMENT**

- EN 2
- EN 3
- EN 4

**INSTALLATION TO ERECT THE DOOR**

As supplied, the square pivot of the closer sits in the central (closed) position. Use grease and suitable leverage to rotate the square pivot to the 90° position. In the case of an NHO closer, wind the closing speed adjuster in fully to give sufficient time to load the door into position.

Hold door or approximately 15° position lower onto the pivot bolt and swing the door into the vertical position locating the closer spindle into the arm recess.

**FLOOR**

**BOTTOM DOOR RAIL**

**DOOR HEADER**

**WITH CLOSER**

**POWER ADJUSTMENT**

Use 8mm open end wrenches

Factory presetting size: EN2.

**Note:** To ease the hanging of single action doors, it may be necessary to temporarily remove the door stop if already fitted. Wedge the door in position and fit the arm clamp block with the 2 No. M6 x 15mm hexagon head bolts and flat washers through the angle bracket and the 2 No. M6 x 15mm round head screws and lock washers into the closer lugs. Once the 70mm pivot centre has been achieved, tighten the bolts securely. Centralise the closer.

**As supplied, the square pivot of the closer sits in the central (closed) position. Use grease and suitable leverage to rotate the square pivot to the 90° position. In the case of an NHO closer, wind the closing speed adjuster in fully to give sufficient time to load the door into position.**

**INSTALLATION TO ERECT THE DOOR**

As supplied, the square pivot of the closer sits in the central (closed) position. Use grease and suitable leverage to rotate the square pivot to the 90° position. In the case of an NHO closer, wind the closing speed adjuster in fully to give sufficient time to load the door into position. Address the door in position and fit the arm clamp block with the 2 No. M6 x 15mm hexagon head bolts and flat washers through the angle bracket and the 2 No. M6 x 15mm round head screws and lock washers into the closer lugs. Once the 70mm pivot centre has been achieved, tighten the bolts securely. Centralise the closer.

**HOLD OPEN OPTIONS**

1. Closing range
2. Latching range

**CLOSING RANGE**

- 130°
- 115°
- 105°
- 95°

**NOTE:**

1. For Side Load and End Load (AFT) installation, please refer to page 2.
2. The thread of all fixings should be applied with Loctite 222 or similar and securely fastened.

**Hinge Jamb**

For front bracket, you have two options 1 or 2, depending on the fixing hole used.

**INSTALLATION TO ERECT THE DOOR**

As supplied, the square pivot of the closer sits in the central (closed) position. Use grease and suitable leverage to rotate the square pivot to the 90° position. In the case of an NHO closer, wind the closing speed adjuster in fully to give sufficient time to load the door into position. Hold door at approximately 15° position lower onto the pivot bolt and swing the door into the vertical position locating the closer spindle into the arm recess.

**Minimum dimensions of transom and door**

**POWER ADJUSTMENT**

- EN 2
- EN 3
- EN 4

Factory presetting size: EN2. A full turn needed for each strength setting.

**NOTE:** To ease the hanging of single action doors, it may be necessary to temporarily remove the door stop if already fitted.
Read all instructions before starting installation

OPTIONS FOR ARM INSTALLATION

SIDE LOAD - TOP ARM & CHANNEL, 70MM PIVOT POINT

Prepare the top rail of the door as detailed, ensuring that the internal faces of the stile and top rail have been cut away to enable the closer spindle to be engaged during door hanging.

Drill 7mm hole in the heel of the door giving access to the adjustment screw. Fit steel arm channel to top rail using the 4 No. M6 countersunk screw. Fit the adjustment screw into the channel post and the 2 No. alignment bolts into the arm. Place the arm into the channel and fit the large countersunk washer and socket head screw. Slide the arm centrally over the pre-punched pivot mark in the channel and adjust position with screw. Unwind alignment bolts equally. Tighten all fixings.

END LOAD AFT - TOP ARM & CHANNEL, 70MM PIVOT POINT

Prepare the top rail of the door as detailed, ensuring that the internal faces of the stile and top rail have been cut away to enable the closer spindle to be engaged during door hanging.

Drill 7mm hole in the heel of the door giving access to the adjustment screw. Fit steel arm channel to top rail using the 4 No. M6 countersunk screw. Fit the adjustment screw into the channel post and the 2 No. alignment bolts into the arm. Place the arm into the channel and fit the large countersunk washer and socket head screw. Slide the arm centrally over the pre-punched pivot mark in the channel and adjust position with screw. Unwind alignment bolts equally. Tighten all fixings.

SIDE LOAD AFT - TOP ARM & CHANNEL, 70MM (65mm with 51AS) PIVOT POINT

Prepare the top rail of the door as detailed, ensuring that the internal faces of the stile and top rail have been cut away to enable the closer spindle to be engaged during door hanging.

Drill 7mm hole in the heel of the door giving access to the adjustment screw. Fit steel arm channel to top rail using a the 4 No. M6 countersunk screw. Fit the adjustment screw into the channel post and the 2 No. alignment bolts into the arm. Place the arm into the channel and fit the large countersunk washer and socket head screw. Slide the arm centrally over the pre-punched pivot mark in the channel and adjust position with screw. Fit the 2 No. allen screws and the conical washers after the door has been hung. Tighten all fixings.

BOTTOM PIVOT ASSEMBLY - 70MM PIVOT POINT

Prepare the bottom rail of the door to accommodate the pivot shoe with 2 No. drilled and tapped M6 holes at 98.5mm and 143mm centres. Fit pivot shoe to underside of door, through the slotted holes with 2 No. M6 x 16mm round head screws and lock-washers. The centre hole should be drilled and tapped on site when correct alignment of the door has been achieved.

THIS FINAL FIXINGS MUST BE USED.

If an aluminium threshold is being used prepare as shown below. The 5mm thick plate is held in position by the M5 countersunk screw and the pivot bolt can be installed. Determine the correct height of the pivot and tighten the locknut. If the bolt protrudes below the base of the threshold the excess must be removed or the floor level drilled accordingly.