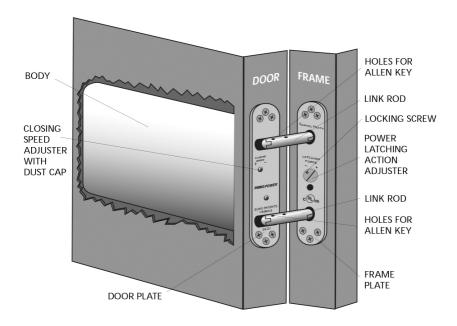


The Third Generation Concealed Door Closer R104

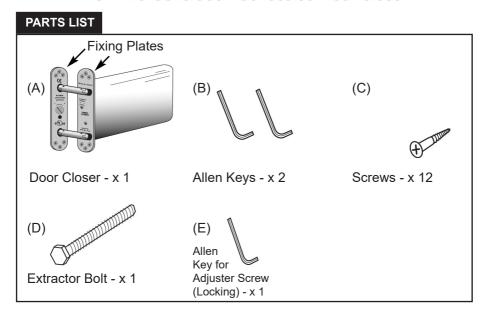


IMPORTANT NOTICE - FOR FIRE DOOR INSTALLATIONS REFER TO ITEM 1 IN FITTING INSTRUCTIONS

- FOR USE WITH SIMONSWERK TE540, TE540FR & TE527 HINGES
- · A door holder/stop must be fitted
- Should **NOT** be used with rising butt hinges.
- · Maximum door weight 175lbs, width 36".
- Can be adjusted to aid ADA compliance.
- · Adjustable speed control.
- · Adjustable power latching action.
- Approved to UL10C, UL10B, UL238 & ANSI 156.4 reg.



The Third Generation Concealed Door Closer



CHECK ALL COMPONENT PARTS AGAINST PARTS LIST.

TOOLS REQUIRED

- Screwdriver (Plain Slotted)
- Screwdriver (Phillips)
- Wood Chisel 1" x 7" blade
- · Solid Centre Auger Bit or Spade Bits
- 1 1/16" Ø and 1 1/8 Ø
- Awl
- Power Drill
- · Tape Measure
- Pencil
- Adjustable Spanner
- Ruler

The use of a dedicated morticing tool is highly recommended for multiple installations

Order code R98.XX which includes everything you need.

Eye protectors,

Ear Defenders and a

Face Mask are recommended during installation of

Perkopower.

IMPORTANT NOTICE

DOOR CLOSERS FITTED TO A FIRE DOOR

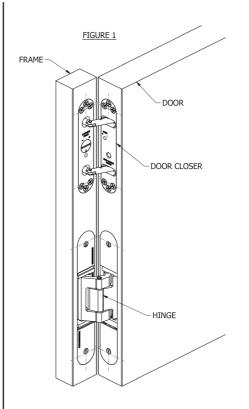
- Perkopower, conforms to Grade 3 of ANSI/BHMA A156-4 when the power latching action is set to maximum.
- Turn adjuster screw fully to positive (+) as explained in 9.
- Closer must be fitted no more than 30" from floor and within 12" of a hinge.
- Closer and plates should be bedded in Alfacryl FR Intumescent Acrylic Mastic available from Samuel Heath.
- For ADA requirements turn power latching adjuster screw towards negative until opening forces are achieved.

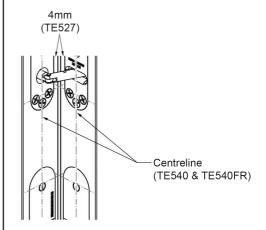
2 DOOR CLOSER POSITIONING

• The hinge is installed 4mm from the inside edge of the door. For use with TE540 and TE540FR hinges, our door closer must be fitted with the centreline of the mounting plates in line with the centreline of the hinge mounting plates. The door closer should be located between the bottom and middle hinge.

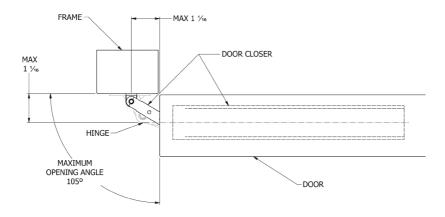
For use with TE527 hinges, the closer should be installed with the mounting plates 4mm from the pivoting edge of the door/frame.

- The door closer must be installed within the dimensional constraints shown in figure 2
- A door stop must be installed to restrict the door opening angle to a maximum of 105° as shown in figure 2.





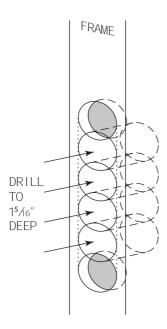
To achieve a maximum opening angle of 105° the closer must be installed within the constraints of fig. 2



FRAME PREPARATION FOR FRAME PLATE

For hollow metal frames, fixing brackets will need to be factory welded in place.

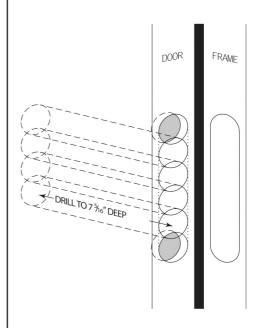
Order item R199.XX



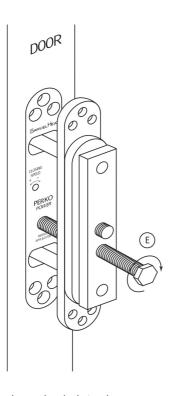
NB To ensure correct operation of closer there must be a 1/8" gap between the two fixing plates when the door is in the closed position.

- Drill 4 x 1 1/8" Ø holes 1 5/16" deep to accept frame plate assembly as indicated on template
- Drill 2 x 1 1/8" Ø holes to accept frame plate ends. Depth must also cater for 1/8" gap between plates when fitted.
- Remove excess timber between drilled holes to accommodate frame plate.

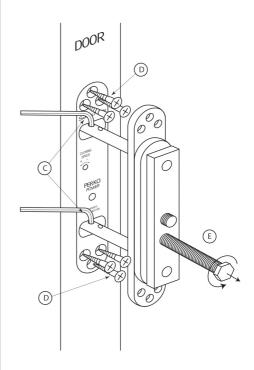
DOOR PREPARATION FOR BODY & DOOR PLATE



- Drill 4 x 1 $\frac{1}{16}$ Ø x 7 $\frac{5}{16}$ deep to accept frame plate assembly as indicated on template
- Drill 2 x 1 1/8" Ø holes to accept door plate ends. Depth must also cater for 1/8" gap between plates when fitted.
- Remove excess timber between drilled holes to accept the closer body and door plate.



- Insert closer body into door.
- Insert extractor bolt (E) into position and rotate clockwise until holes in link rods appear.
- Generally for thicker doors expose both holes on each rod.

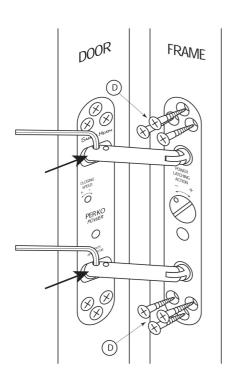


- Insert the Allen keys (C) through both top and bottom link rod holes.
 Both Allen keys must be correctly located
- Remove extractor bolt.
- Secure door plate to door with six screws (D).

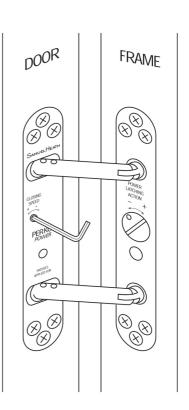
IMPORTANT

With composite doors and door linings it is essential to drill pilot holes Ø 3/32" (2.5mm) to suit fixing screws.

ADJUSTMENT - CLOSING SPEED

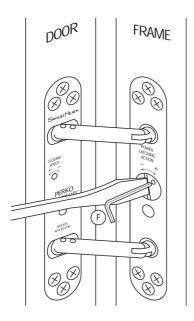


- With the closer secure and now held open by Allen keys, if necessary firmly push both link rods across door plate and offer frame plate into frame void. Secure with six screws (D).
- Open door slightly and remove Allen keys.
- Installation is now complete.



- Remove dust cap.
- Use one of the Allen keys (C) to adjust closing speed.
- Positive (+) increases door speed. Negative (-) reduces door speed, as indicated on door plate.

ADJUSTMENT - POWER LATCHING ACTION



- The power latching action can be adjusted using a plain flat ended screwdriver.
- Loosen locking screw using Allen key (F) to allow the adjuster screw to turn.
- Positive (+) increases the angle at which latching action engages.
 Negative (-) decreases angle at which the latching action engages.
- Re-tighten locking screw when correct power latching action achieved.

The Perkopower is protected by the following Patents and Applications.

CANADA 2365822 2436363

HONG KONG 1038953

JAPAN 2000-602490

 SINGAPORE
 82862

 TAIWAN
 156554

USA 6625847 2004/0111831

UK GB25447175 GB2415014

EP1605126

AUSTRIA

BELGIUM

DENMARK

FRANCE

GERMANY

IRELAND __ EP1605126

ITALY

LUXEMBOURG

NETHERLANDS

SPAIN

SWEDEN

SWITZERLAND

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