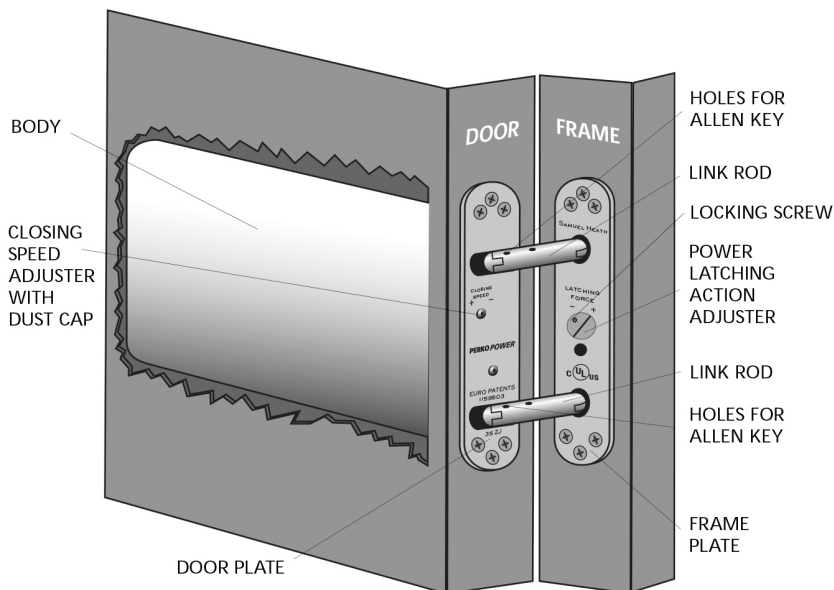


PERKOPOWER

The Third Generation Concealed Door Closer

R102



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

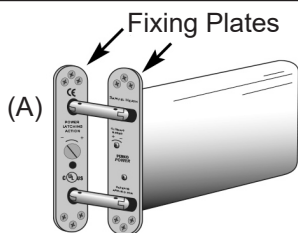
- SUITABLE FOR USE WITH 4" WIDE HINGES TO GIVE MAXIMUM OPENING ANGLE OF 105° WHEN FITTED TO 1 ¾" DOOR.
- A door holder/stop must be fitted
- 1 ½ pairs of hinges should be used in conjunction with this closer on all doors.
- Should **NOT** be used with rising butt hinges.
- Maximum door weight 175lbs, width 36".
- Approved to UL 10B, UL 10C and UL 228. ANSI 156.4 Reg.
- Can be adjusted to aid ADA compliance.
- Adjustable speed control.
- Adjustable power latching action.
- Metal frame fixing bracket available. (R199.XX)

**PLEASE READ FITTING INSTRUCTIONS THOROUGHLY
BEFORE INSTALLATION**

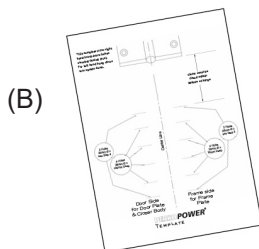
PERKOPOWER

The Third Generation Concealed Door Closer

PARTS LIST



(A) Door Closer - x 1



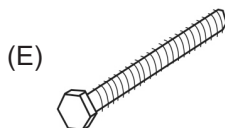
(B) Template - x 1



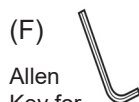
(C) Allen Keys - x 2



(D) Screws - x 12



(E) Extractor Bolt - x 1



(F) Allen Key for Adjuster Screw (Locking) - x 1

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.

1 IMPORTANT NOTICE

DOOR CLOSERS FITTED TO A FIRE DOOR

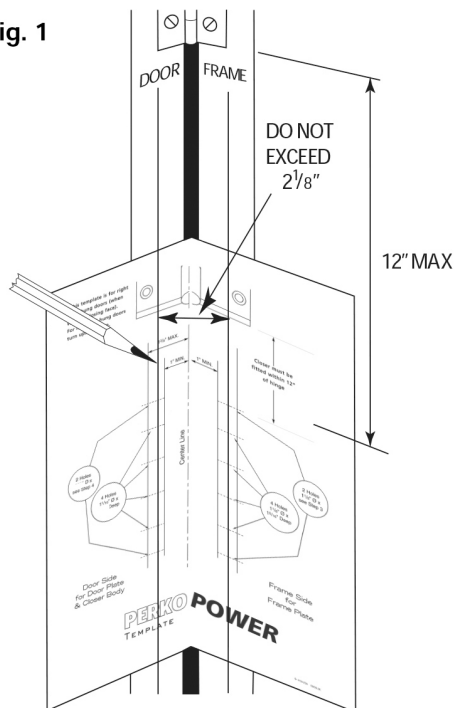
- Perkopower, conforms to Grade 3 of ANSI/BHMA A156-4 when the power latching action is set to maximum.
- Turn adjuster screw fully to positive (+) as explained in 9.
- Closer must be fitted no more than 30" from floor and within 12" of a hinge.
- Closer and plates should be bedded in Alfacyrl FR Intumescent 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

- Ensure door is plumb, hinges are free, and that timber is sound.
- Take template provided and fold along center line. Open door to 90°.
- Secure template to door edge and frame edge within 12" of a hinge ensuring the center line is central in line with the pivot point of the hinge.
- Draw a vertical line at the centre point of the door edge on the template.

NB This line must not exceed 1 3/8" from template centre line.
See Fig. 2

Fig. 1

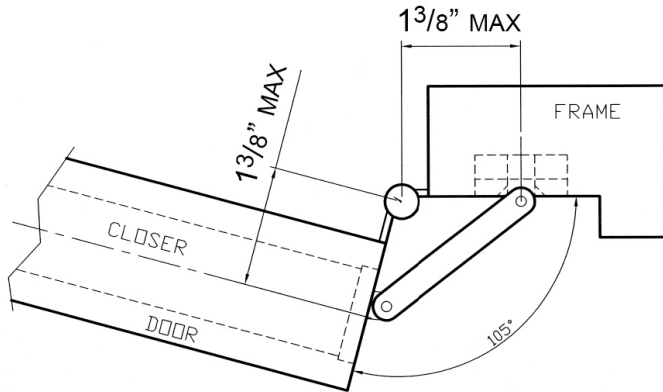


- Repeat on frame edge.
- The maximum distance between these 2 vertical lines must not exceed 2 1/8" when door is opened to its maximum of 105°.
- At each point on the template where the vertical lines cross the horizontal dotted lines mark through the template using an awl into the door edge and frame edge to establish drilling points. Remove template RETAIN FOR REFERENCE

NOTE: Door can now be removed from frame to assist drilling if preferred.

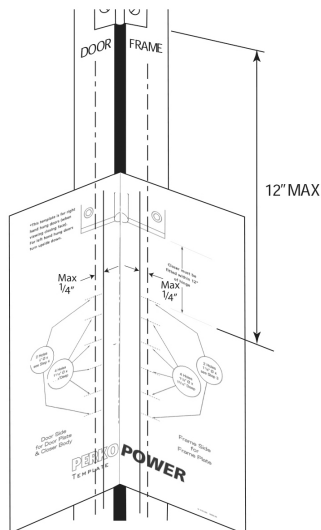
To achieve a maximum opening angle of 105° the center of the closer must be no more than 1 $\frac{3}{8}$ " from the pivot point of the hinge.

Fig. 2



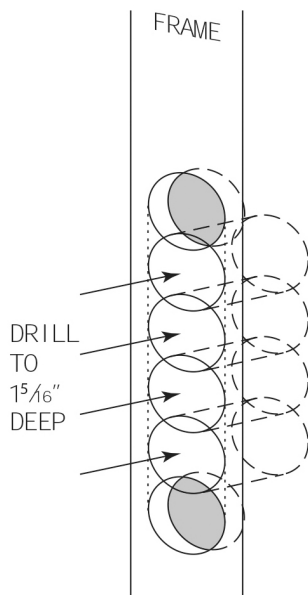
IMPORTANT

To ensure the 1 $\frac{3}{8}$ " distance is not exceeded the closer and fixing plate can both be offset in the door leaf and jamb (closer to the hinge pivot point) by up to a maximum of $\frac{1}{4}$ " as illustrated below.



3 FRAME PREPARATION FOR FRAME PLATE

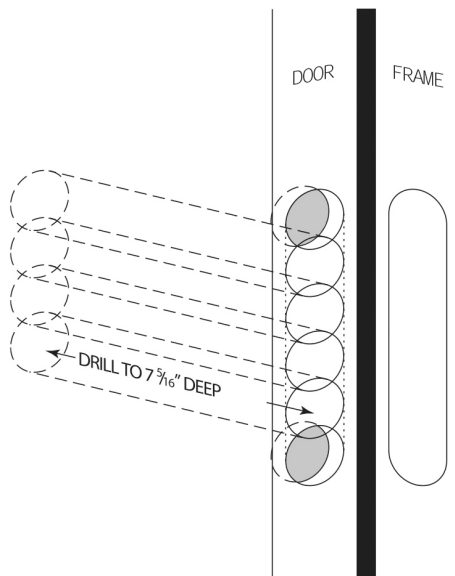
For hollow metal frames, fixing brackets will need to be factory welded in place.
Order item R199.XX



NB *To ensure correct operation of closer there must be a $\frac{1}{8}$ " gap between the two fixing plates when the door is in the closed position.*

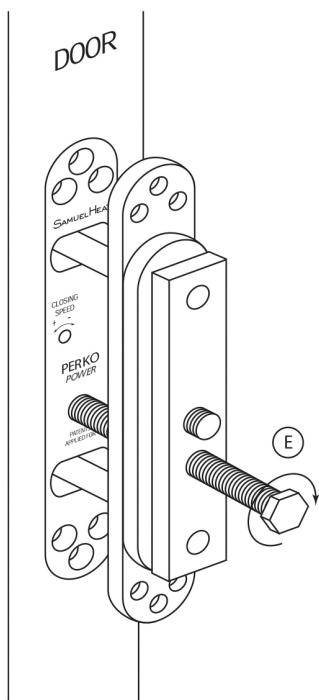
- Drill 4 x $1 \frac{1}{8}$ " \varnothing holes $1 \frac{5}{16}$ " deep to accept frame plate assembly as indicated on template
- Drill 2 x $1 \frac{1}{8}$ " \varnothing holes to accept frame plate ends. **Depth must also cater for $\frac{1}{8}$ " gap between plates when fitted.**
- Remove excess timber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

4 DOOR PREPARATION FOR BODY & DOOR PLATE



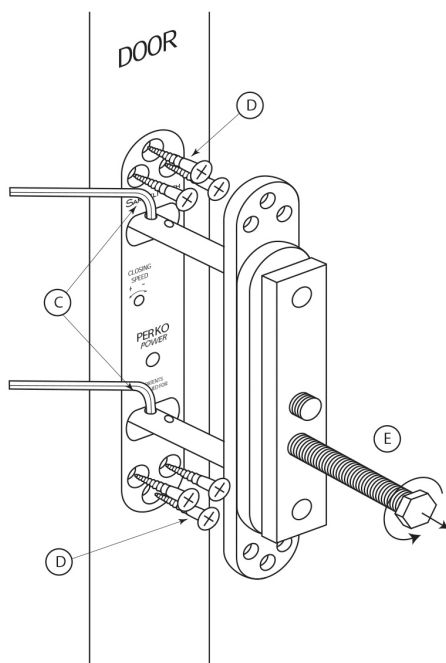
- Drill 4 x $1 \frac{1}{16}$ " \varnothing x $7 \frac{5}{16}$ " deep to accept frame plate assembly as indicated on template
- Drill 2 x $1 \frac{1}{8}$ " \varnothing holes to accept door plate ends. **Depth must also cater for $\frac{1}{8}$ " gap between plates when fitted.**
- Remove excess timber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

5 INSTALLING CLOSER



- 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.

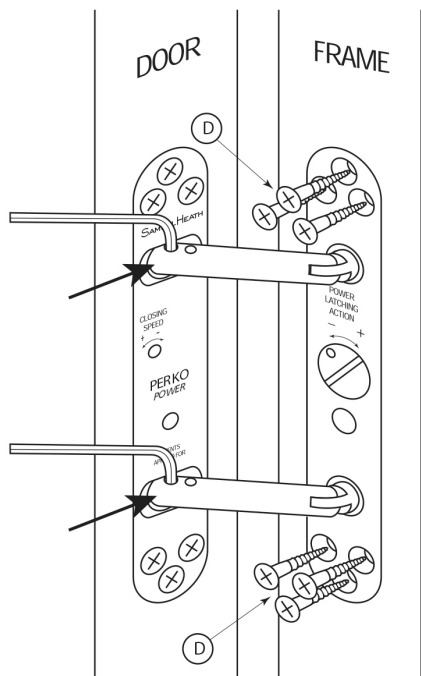
6



- 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 $\varnothing \frac{3}{32}$ " (2.5mm) to suit fixing screws.

7



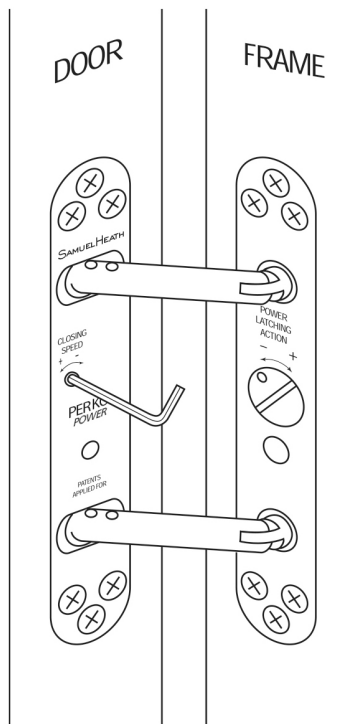
- With the closer secure and now held open by allen keys, if necessary firmly push both link rods across door plate and offer frame plate into frame void. Secure with six screws (D).

- Open door slightly and remove allen keys.

- Installation is now complete.

8

ADJUSTMENT - CLOSING SPEED

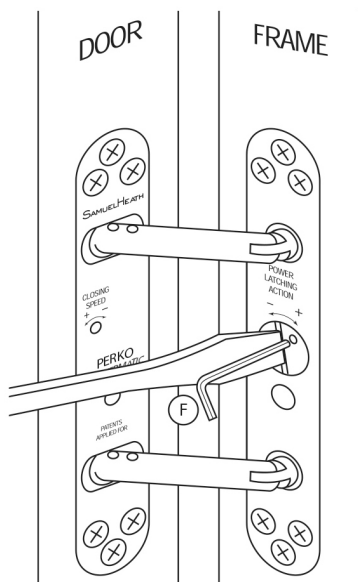


- Remove dust cap.

- Use one of the allen keys (C) to adjust closing speed.

- Positive (+) increases door speed. Negative (-) reduces door speed, as indicated on door plate.

9 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

ITALY

LUXEMBOURG

NETHERLANDS

SPAIN

SWEDEN

SWITZERLAND

LIECHTENSTEIN

EP1605126

Samuel Heath & Sons plc

Leopold Street
Birmingham
B12 0UJ, England

T: +44 (0)121 772 2303
F: +44 (0)121 772 3334
Sales Office Direct Line: +44 (0)121 766 4200

Info@samuel-heath.com
www.samuel-heath.com

US Customer Service

usa@samuel-heath.com
Federal I.D. No. 58-1504682
www.samuel-heath.com/us

www.samuel-heath.com / www.perkopower.com

9-395-US