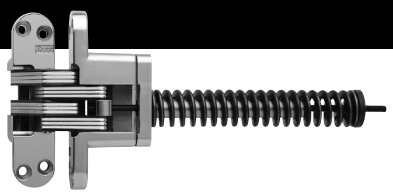
SOSS® Invisible Closer Installation Instructions

New Installations



SAFETY

Protective eyewear should be worn by anyone operating equipment used in the installation of SOSS Invisible Hinges, as should those in the area where the work is being performed.

IMPORTANT

Read these instructions prior to undertaking the installation of the SOSS Invisible Closer. These instructions pertain only to the installation of the SOSS Invisible Closer. Instructions for the installation of standard (non self-closing) hinges are enclosed in the package containing the hinges.

NOTICE

Please use at least one fire-rated closer for every 20" of door height or portion thereof, or one closer for each 55 lbs. of door weight or fraction thereof, whichever calculation demands more closers.

Recommended Equipment

Hinge paper template (supplied)
Sharp Chisel
Drill or Brace
Extension shaft for drill bits

Spade or wood drill bits as follows:
for #212IC, 212SSIC: 9/16" bit for drilling spring clearance hole
for #216IC, 416IC, 416SSIC: 3/4" bit for drilling spring clearance hole
for #218IC, 418IC, 418SSIC: 1" bit for drilling spring clearance hole
for #220IC, 220ASIC, 220SSIC: 1" bit for drilling spring clearance hole

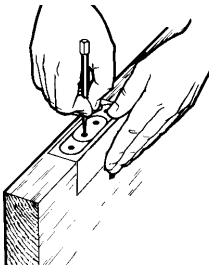
3/4" bit for drilling hinge body mortises
1" bit for drilling hinge body mortises
1 1/8" and 1/2" bit for drilling hinge body mortises
1 3/8" and 1/2" bit for drilling hinge body mortises

Installation Using the Paper Template

1 Make the required measurements on both the door and jamb where the hinges and closer shall be mounted. Make certain that clearance is provided between the top of the door and the jamb to permit free movement of the door after installation,

Note: It is recommended that the SOSS Invisible Closer be mounted such that the spring-bearing portion of the hinge is situated in the door.

2 Fold the paper template along the fold line on the template. **Note: There is a top for left handed doors and a top for right handed doors.**



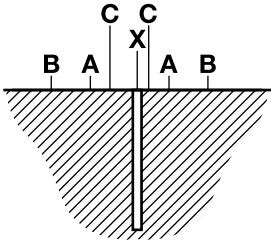
3 Using a punch or similar object, punch holes into the door at the locations marked by the drill-point indicators (crosshairs). Note the drill-point indicator marked with an **X**. This is the point where the clearance hole for the spring must be drilled.

4 Remove the template from the door prior to doing any drilling.

WARNING:

It is imperative that all drilling be done with the utmost precision and care. Special attention must be directed to the drilling of the spring clearance hole. You will be required to drill a relatively large diameter hole over 7" deep (in the case of a solid-core door). Special precautions should be taken to assure that the holes you will be drilling are perpendicular to the mounting surface.

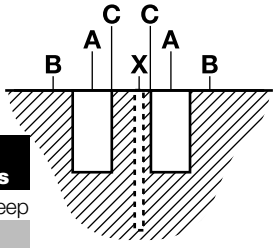
5 At the punch point corresponding to the **X**, a small diameter hole (approximately 1/8" diameter or less) should be drilled at least 2 3/4" deep.



NOTE: This is the start point for the eventual drilling of the spring clearance hole. The spring clearance hole will be drilled after the hinge mortise has been formed. Do not drill through it, or you will have to visually ascertain it's location at a later time.

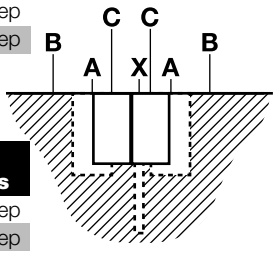
Drilling of Hinge Body Mortises

6 At the punch points marked with **A**, drill the required size holes to the depths listed below by hinge size.



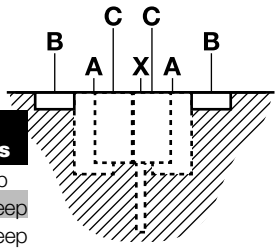
Invisible Closer Model #	Drill Bit Size	Depth of Holes
#212IC, 212SSIC	3/4"	1 3/16" Deep
#216IC, 416IC, 416SSIC	1"	2" Deep
#218IC, 418IC, 418SSIC	1/2"	2 1/8" Deep
#220IC, 220ASIC, 220SSIC	1/2"	2 1/2" Deep

7 At the punch point marked with **C**, drill the required size holes to the depths listed below by hinge size.



Invisible Closer Model #	Drill Bit Size	Depth of Holes
#218IC, 418IC, 418SSIC	1 1/8"	2 1/8" Deep
#220IC, 220ASIC, 220SSIC	1 3/8"	2 1/2" Deep

8 At the punch point marked with **B**, drill the required size hole according to the following chart:



Invisible Closer Model #	Drill Bit Size	Depth of Holes
#212IC, 212SSIC	3/4"	3/8" Deep
#216IC, 416IC, 416SSIC	1"	15/32" Deep
#218IC, 418IC, 418SSIC	1 1/8"	13/32" Deep
#220IC, 220ASIC, 220SSIC	1 3/8"	15/32" Deep

9 Using a chisel or router, remove the wood protruding into the hinge outline to form a smooth mortised surface.

10 Locate the spring clearance starter hole, and remove any excess wood preventing the drill from entering the starter hole.

11 Make sure that the proper size drill bit is being used for the spring clearance hole!

The spring clearance hole must be drilled centered in the starting hole, and must be drilled perpendicular to the edge (thickness) of the door.

12 In drilling the spring clearance hole in hollow-core doors, you will drill into the cavity of the door, thus completing the drilling on the door side of the SOSS Invisible Closer. Solid-core doors will require drilling the spring clearance hole 7" deeper than the hinge-body mortise.

13 To create the hinge-body mortise for the jamb side of the closer, repeat this sequence of instructions ignoring everything pertaining to the drilling of the spring clearance hole. Ignore that indicator on the template.

14 Once the hinges are installed and the door swing is found to be satisfactory, the door closure speed may be set by adjusting the socket-head fastener (requires 5/32" hex wrench). Turning the fastener in a clockwise direction increases spring tension and door closing speed. The spring tension should be adjusted gradually until the desired closing speed is achieved.

15 If all tension is removed, it can not be added once installed. The hinge will have to be removed to add spring tension, then reinstalled.

16 Lubrication may be used.

WARNING:
Self-closing doors are potentially dangerous to animals, children and the handicapped! Suitable measures should be taken to prevent anything from being caught between the door and the jamb!

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Door Hardware

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