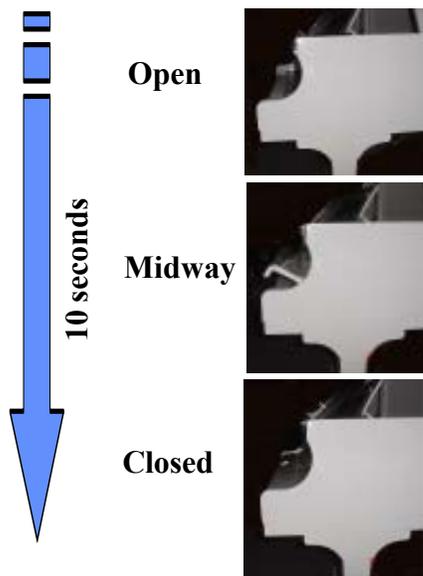


STOP THE SLAMMING

Pneumatic Fallboard Closer

**With the Fallboard Closer, the key cover will gently come to rest in about 10 seconds.
Installs in less than 30 minutes.**



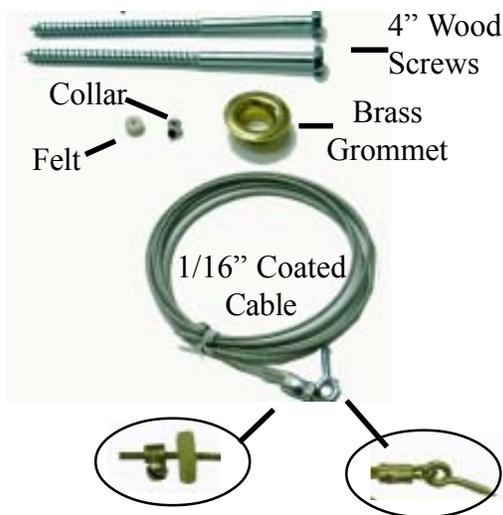
- * Easy to install
- * Absolutely quiet
- * Speed adjustable
- * Fits all pianos
- * Inexpensive
- * No more crushed fingers
- * Unique design
- * Easily hidden under piano
- * No major modifications to the fallboard or cheek blocks

Adding the fallboard closer to piano prevents the fallboard from quickly collapsing on to the piano.

Cat No.	Description
46018	Pneumatic Fallboard Closer

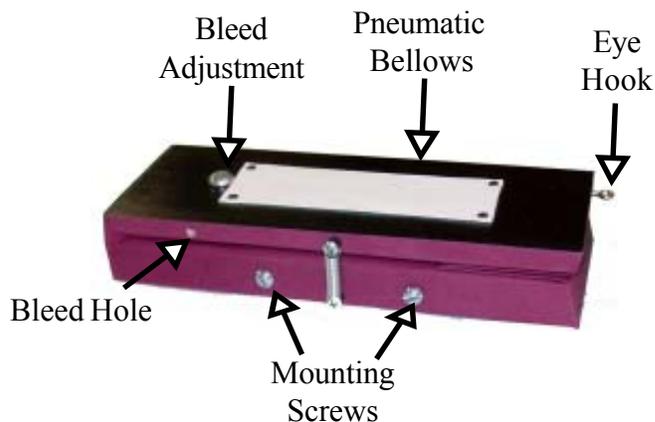
Fallboard Closer Kit 46018 Consists of:

- Pneumatic bellows
- 1/16" OD coated cable
- Screw eye
- Brass grommet
- 4" wood screws (2)
- Set collar
- Felt ring



Required Tools & Supplies:

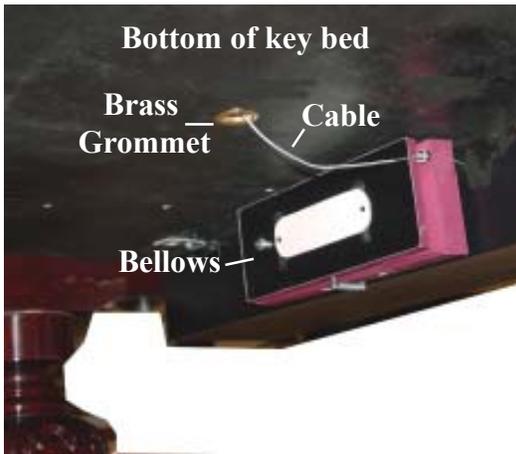
- Paddle drill bit 1/2"
- 3/32" drill bit
- 3/4" counter bit
- 9/64" drill bit
- Philips head screwdriver
- Flat head screwdriver
- Wire clippers
- Pliers
- Tape measure & marking pencil
- Angle electric drill (Optional)



Pneumatic Fallboard Closer

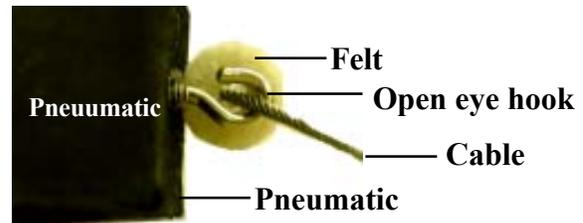
Catalog # 46018

Typical Mounting Configuration





! Do not remove fall board without first unhooking cable from hook on pneumatic under piano !



Before removing action, unhook cable from eye hook.



1. Recommended location to run cable is through break between keys in the lower bass and tenor section and directly behind key cover in the upright position.



2. Drill a 3/8" hole through balance rail (preferably with a spade bit). Place action back in piano and mark position of this hole onto keybed below. Remove the action.



- There are two methods we recommend to ensure correct placement of the 1/2" hole when drilled from the bottom side of the keybed.
- A. Insert a 1/8" bit into a angle electric drill. From above, line this bit up with the center of the pencil mark made on the keybed. Drill through the keybed, being careful to hold the drill straight. Now, using this hole as a guide, drill your 1/2" hole from underneath.
 - B. If an angle electric drill is not available, measure the distance from the edge of the keybed to the center of the mark you made through the balance-rail. Remember this distance. Now, keeping the end of your ruler flush with the edge of the keybed, pass one side of the ruler directly through the center of your mark, and pencil a line from here to the edge. Next, place the ruler flat on the underside of the keybed, numbers facing downward. As closely as possible, line the same edge of the ruler up with the line you have drawn on the topside, and pencil another line to the distance you measured previously. Mark this spot and drill your 1/2" hole.
3. Put a slight bevel on the 1/2" hole from the bottom side with a 3/4" countersink bit. This will allow for a better fit of the brass grommet. Insert the brass grommet into the hole from the bottom of the keybed.

Pneumatic Fallboard Closer

Catalog # 46018

3. Determine whether keybed has a support iron or timber underneath it or not.

- A. If no support beam is present, locate pneumatic under the keybed close to left side of pedal lyre at least 5-1/2" behind freshly drilled hole. You do not want pneumatic eyewire

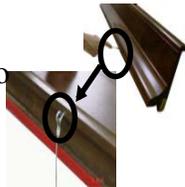


to be in alignment with hole when in the closed position. It should extend to the right of the hole by an inch or so in order to attain the correct leverage of pull as key cover descends and pulls pneumatic open.

Note: If piano is equipped with Pianomation or other similar player device, you may mount pneumatic flush against solenoid rail cover. This has proved satisfactory in our applications.

- B. If there is a support beam under the keybed, the pneumatic can be mounted directly behind it allowing the cable to drag over the beam. This should not impair operation.
- C. If the piano is equipped with a support beam and a player device, the pneumatic can be mounted flush to back edge of the solenoid rail "cover", using extreme care to avoid any contact or damage to any electronic components inside the cover.

- D. It is recommended to use a 9/64" drill bit for mounting pneumatic to thin sheet metal (solenoid cover) and use a 5/32" bit for mounting directly to wood (keybed).



4. Drill 1/16" hole in back edge of key cover in approximate alignment of the freshly drilled 3/8" hole between keys and apply eye screw and cable firmly.

5. To replace key cover back onto piano, first fish the cable through holes and out bottom of key bed. Affix key cover.



6. Thread cable through eye wire on pneumatic, apply felt washer and set collar. It may take a couple different settings of the set collar to find the desired (feel of catch) when closing key cover.



7. The rate of fallboard closure is set by a screw which controls the bleed rate. Turn clockwise to slow down, counter clockwise to speed up. We feel 10 seconds is optimal.

QRS Music Technologies, Inc.

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