



## INSTALLATION AND OPERATION INSTRUCTIONS

### INSTALLATION

1. Thoroughly inspect the seat tracks for cracks, bends, burrs or worn holes. Replace or repair as necessary per AD 2011-10-09.
2. Check for proper operation of existing seat latch. It should move freely when the hand lever is pulled. The spring should be able to return the locking pins to the lock position with a “snap”. All parts must function with no issues.
3. The most convenient and protected place to install the Aerostop seat lock is on the inside track using only one Aerostop seat lock per seat. (See Figure 1)
4. Lift the handle all the way up and slide the Aerostop set on the rail from the back of the rail. Slide the lock up and down the track checking to make sure that there are no tight spots. It should slide freely with no binding. If there is a tight spot in question, inspect the seat track for damage and repair per AD 2011-10-09.
5. Attempt to lock your seat lock on the rail by firmly pushing the handle down towards the rail. The bottom of the handle should intersect with the seat lock body within the machined 45 degree angle cut on the top front of the seat lock body (you should also be able to feel a firm tension when the cam lock engages correctly). This is a general location to let you know if it is locking properly. You may need to adjust the number setting of the cam assembly if the seat lock does not engage properly (**SEE CAM ADJUSTMENT – PAGES 3 & 4 - FOR DETAILED INFO - versions 2.0 and 2.1 only**).
6. This device is not a replacement part for worn or improperly maintained original seat tracks or latches. Aerostop seat lock is intended as a **BACKUP DEVICE** only. The Aerostop seat lock is not to be used in-lieu of worn seat pins. **DO NOT REMOVE U-SHAPED PINS OR FACTORY SEAT STOPS AT END OF RAILS.**

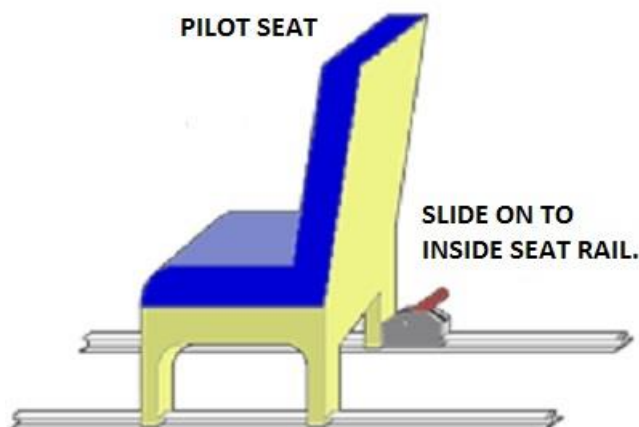


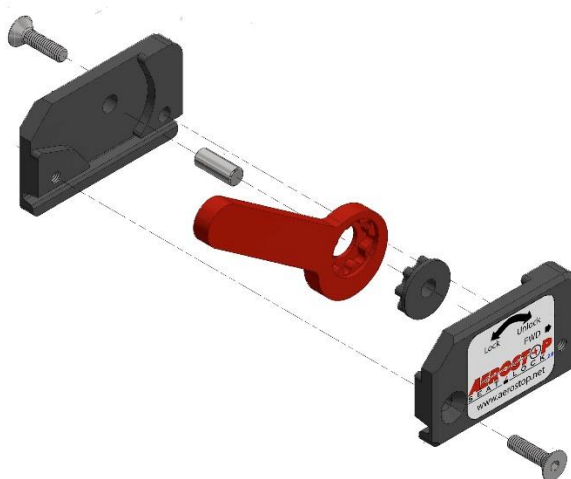
Figure 1 (not to scale)

## TESTING

1. Slide Aerostop seat lock and the seat to the rear and enter the aircraft as normal.
2. Move the seat to your normal operating position, rocking back and forth in your seat to determine that the seat pins are locked in the track.
3. Reach back between the seats with your right hand (Pilot) or left hand (Co-Pilot/Passenger) and slide the Aerostop seat lock up against the back of the seat frame.
4. With firm hand pressure, push down on the handle to lock the cam on the track.
5. Unlock your seat latch and push with both feet trying to move the seat to the rear. The Aerostop seat lock should remain locked and in position.

## OPERATING PROCEDURES

1. Slide the Aerostop seat lock and the seat to the rear and enter the aircraft as normal.
2. Move the seat to your normal operating position, rocking back and forth in your seat to confirm that the seat pins are locked securely in the track.
3. Reach back between the seats with your right hand (Pilot) or left hand (Co-Pilot/Passenger) and slide the Aerostop seat lock up against the back of the seat frame.
4. With firm hand pressure; push down on the handle to lock the cam on the track.
5. To release, reach between the seats and lift the handle. Slide the Aerostop seat lock to the rear position for exit.
6. Be sure all passengers are instructed on the procedure for exiting.





## **CAM ADJUSTMENT (Versions 2.0 and 2.1 only)**

**My handle travels all the way down and still won't lock:**

1. Using the supplied allen wrench, remove the two machine screws holding the body of the seat lock together. **Be careful when separating the halves so that you don't lose any internal parts and so you can read the current number setting on your cam system. Default setting is THREE (3).**
2. Separate the two bodies making sure to look for the current number that your cam system is set at so you can make the correct adjustments. Place the dowel in a safe spot so you do not lose it.
3. You will see the numbers 1-8 engraved on the red handle and a dot engraved onto the black insert. Whichever number the dot aligns with will tell you what number setting you are on.
4. Since your handle is **loose** and will not engage, it is necessary to pick the next **highest** number for your cam setting. Be sure to check track wear limits per AD2011-10-09. You do not want to over adjust cam if seat track is worn beyond limits.
5. Reassemble the seat lock with the following steps:
  - a. Lay the outer surface of the R/H seat lock housing on a flat surface and insert the dowel pin into the dowel pivot point (centrally located hole).
  - b. Install the black insert with the flat surface down so that the reference dot is visible.
  - c. Position the red handle (with the engraved numbers visible) over the black insert making sure the reference dot is aligned with the number setting of your choice.
  - d. Place the L/H seat lock housing over the assembled parts using the dowel pin as an alignment tool.
  - e. Before installing screws apply a small amount of Permatex 771 nickel anti-seize lubricant (part number 77124) to the end of threads on each screw. A 1/2-ounce tube (part number 77134) may also be used or equivalent nickel based anti-seize compound.
  - f. Install screws to 50 inch-pounds of torque or  $1/8$  of a turn after light contact of the screw head with the body of the seat stop lock using the supplied allen wrench.
6. Continue steps 1-5 until you are satisfied with the cam system operation.



## CAM ADJUSTMENT (Ver. 2.0 & 2.1 only) – Cont.

**My handle engages almost immediately and does not lock:**

1. Using the supplied allen wrench, remove the two machine screws holding the body of the seat lock together. **Be careful when separating the halves so that you don't lose any internal parts and so you can read the current number setting on your cam system. Default setting is THREE (3).**
2. Separate the two bodies making sure to look for the current number that your cam system is set at so you can make the correct adjustments. Place the dowel in a safe spot so you do not lose it.
3. You will see the numbers 1-8 engraved on the red handle and a dot engraved onto the black insert. Whichever number the dot aligns with will tell you what number setting you are on.
4. Since your handle is **too tight** and will not engage, it is necessary to pick the next **lowest** number for your cam setting. You should also inspect the seat track for damage that could be causing interference.
5. Reassemble the seat lock with the following steps:
  - a. Lay the outer surface of the R/H seat lock housing on a flat surface and insert the dowel pin into the dowel pivot point (centrally located hole).
  - b. Install the black insert with the flat surface down so that the reference dot is visible.
  - c. Position the red handle (with the engraved numbers visible) over the black insert making sure the reference dot is aligned with the number setting of your choice.
  - d. Place the L/H seat lock housing over the assembled parts using the dowel pin as an alignment tool.
  - e. Before installing screws apply a small amount of Permatex 771 nickel anti-seize lubricant (part number 77124) to the end of threads on each screw. A 1/2-ounce tube (part number 77134) may also be used or equivalent nickel based anti-seize compound.
  - f. Install screws to 50 inch-pounds of torque or 1/8 of a turn after light contact of the screw head with the body of the seat stop lock using the supplied allen wrench.
6. Continue steps 1-5 until you are satisfied with the cam system operation.

**If you have adjusted your seat lock to the 1 position and you are still unable to have your handle lock over to an angled position pointing to the rear of the aircraft, your seat rails are not within normal manufacturer specifications. Please contact us at [info@aerostop.net](mailto:info@aerostop.net) or call us at (530) 295-9004.**