

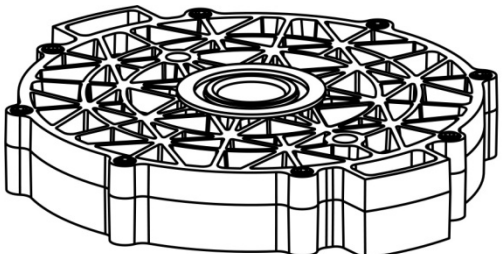
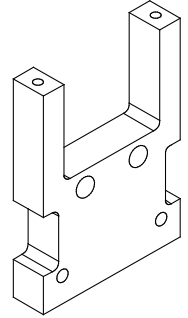
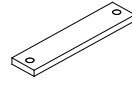


### Who this document is for?

This document is for technicians who have a basic mechanical understanding. The technician who replaces these parts should be able to work on a ladder for an extended period of time.

### Which models are covered by this kit?

This kit replaces the Speed Governor and related hardware on all Full Height Security turnstiles, excluding the MST47 model.

### Parts List and Tools Required

 <p>Speed Governor (Qty 1)</p>	 <p>Bracket (Qty 1)</p>	 <p>Bracket Cap (Qty 1)</p>	 <p>6-32 x 3/8" screw, Zinc (Qty 2)</p>
		 <p>1/4-20 x 3/4" screw, Black oxide (Qty 2)</p>	

### Tools

- 1/8" Allen Wrench
- 3/16" Allen Wrench
- 5/32" Allen Wrench
- 6' Ladder
- #2 Phillips Screwdriver
- 9/16" Open Wrench

### Before You Begin



**WARNING**

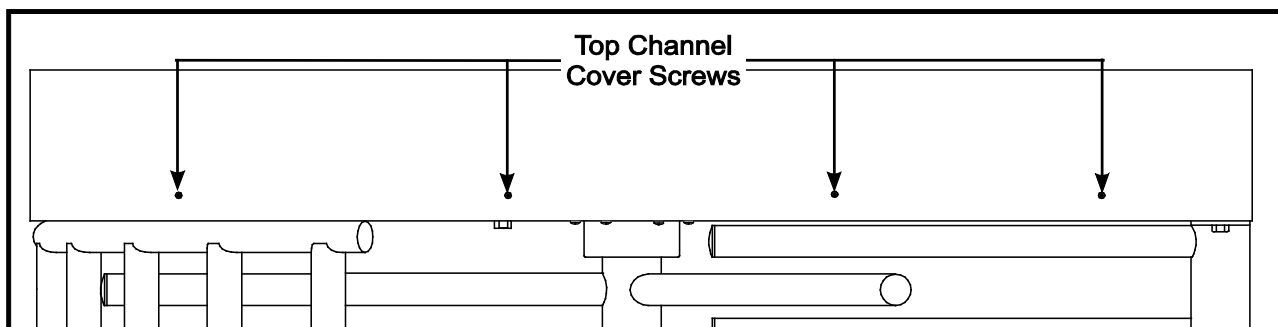
Please be sure all power to the turnstile is **OFF**.

- Power **OFF** the turnstile at the main circuit breaker.

### Removal

1. In order to replace the speed governor, you will need to remove the top channel cover with a 1/8" Allen wrench and set these screws in a secure location (Figure 1).

Figure 1



2. Make sure the junction box toggle switch located in the top channel is in the **OFF** position.

### Old Style Bracket Removal

See Figure 2 for the old style bracket with the shoulder bolt. If you have the new style bracket (Figure 3) then skip to step #6 on page 3.

Figure 2

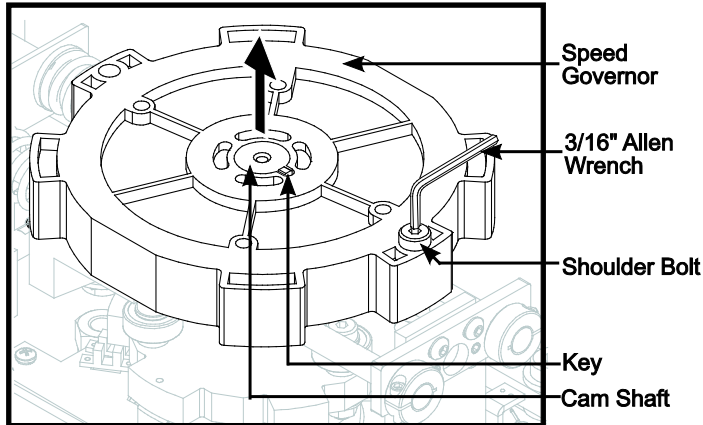
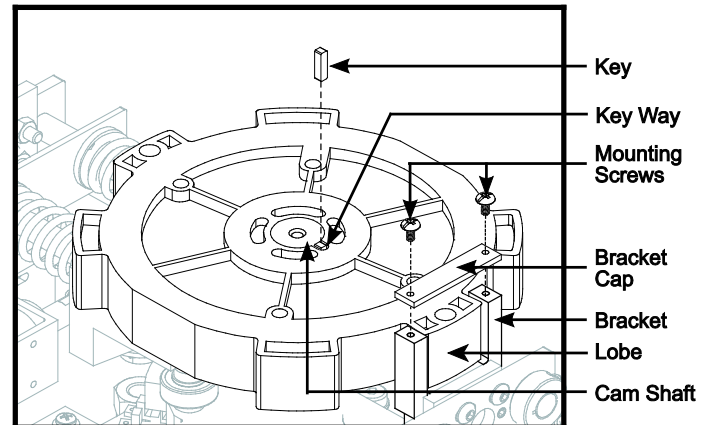


Figure 3



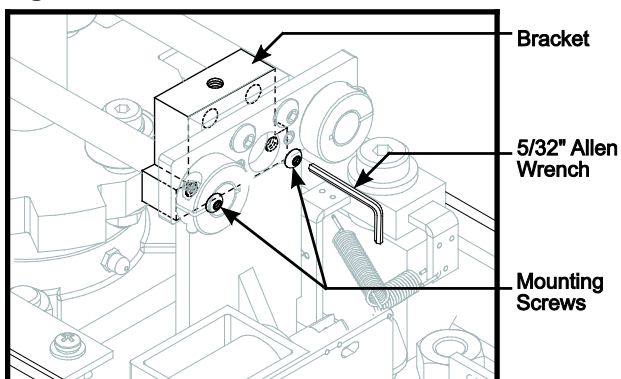
3. Using a 3/16" Allen wrench, remove the shoulder bolt from the old style bracket.
4. Lift the speed governor off the cam shaft.

**NOTE**

The old key may come off during removal of the speed governor. This key can be discarded as it not used with the new speed governor.

Locate the original speed governor bracket and corresponding mounting screws (Figure 4).

Figure 4



- Using a 5/32" Allen wrench, remove the two bracket mounting screws. Remove the bracket from the top channel. Skip to the "Installation" section.

### New Style Bracket Removal

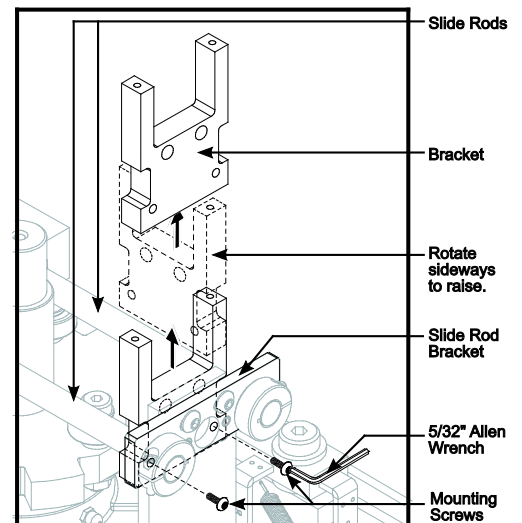
- Using a #2 Phillips screwdriver, unscrew the two bracket cap mounting screws (Figure 3).
- Remove the bracket cap from the assembly.
- Lift the speed governor off the cam Shaft.

#### NOTE

The old key may come off during removal of the speed governor. This key can be discarded as it not used with the new speed governor.

- Using a 5/32" Allen wrench, remove the two bracket mounting screws.
- Rotate the bracket 90 degrees to clear the slide rods and lift the bracket out of the assembly (Figure 5).

Figure 5



## Installation

#### NOTE

Use the new hardware included in the kit when possible during installation of the new speed governor.

The speed governor is non-adjustable. **DO NOT ATTEMPT TO TIGHTEN OR LOOSEN ANY SCREWS LOCATED ON THE SPEED GOVERNOR.**

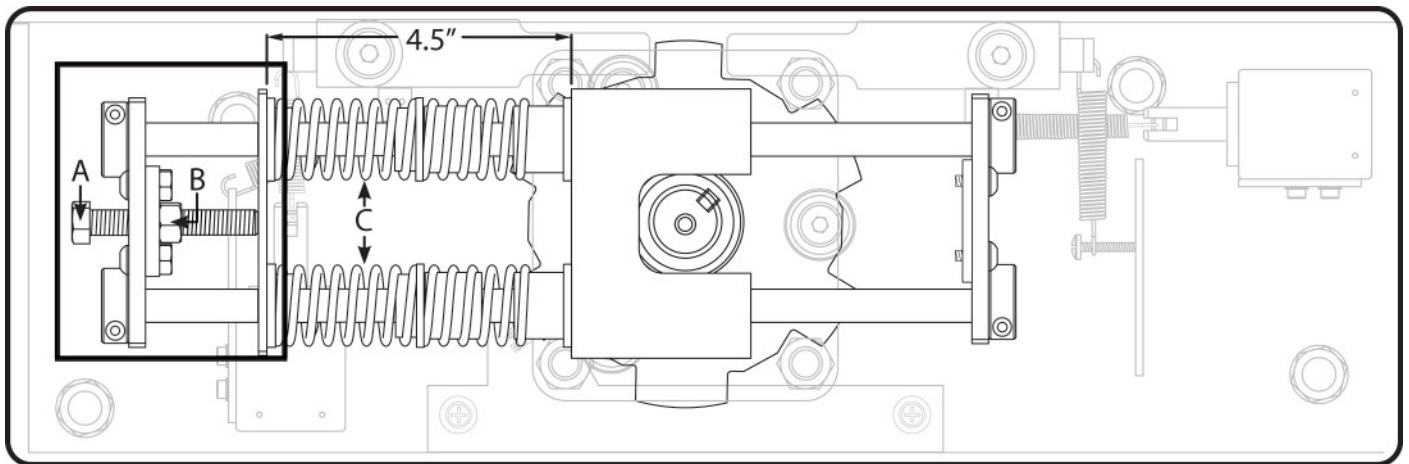
- Rotate the bracket parallel to the slide rods and lower into place. Then rotate the bracket so it is perpendicular to the slide rod and align the grooves of the bracket with the slide rod (Figure 5).
- Using a 5/32" Allen wrench, align the mounting holes on the on the bracket with the mounting holes on the slide rod bracket and secure the two 1/4-20 x 3/4" screws (black oxide).
- Place the speed governor over the cam shaft with the screw heads facing up. Gently lower down until it is resting on the cam shaft.

#### NOTE

Make sure the key way of the cam shaft aligns with the key of the speed governor.

4. Place the bracket cap over the mounting holes of the bracket (Figure 3).
5. Using a #2 Phillips screwdriver, insert the two 6-32 x 3/8" screws (zinc) into the bracket cap mounting holes and tighten.
6. Change the self-centering spring tension:
  - a. Locate the lock bolt (A) and lock nut (B) on the back plate (Figure 6).
  - b. Using a 9/16" open wrench, loosen the lock nut.
  - c. Once the lock nut is loosened, unscrew the lock bolt until the spring span is 4.5" (C). **DO NOT ADJUST THE SPRING SPAN BEYOND 4.5"**.
  - d. Once the self-centering spring tension has been adjusted, tighten lock nut and lock bolt.

**Figure 6**



7. Turn on the power at the junction box located in the top channel.

### Functions Check

**NOTE**

Ensure that power is turned on at the main circuit breaker and at the junction box before performing function check.

1. Test the resistance of the rotation by either:
  - a. Unlocking the turnstile by turning the key override so that the key is parallel to the top channel.
  - or**
  - b. Activating the turnstile by using the access control system.
2. Perform multiple rotations and ensure that there is resistance and that the rotation is smooth.
3. Using a 1/8" Allen wrench, replace the top channel cover and secure with screws (Figure 1).