



SCHEEL MFG



Roller-Delayed Buffer System - RDBS

Usage and Adjustment:

We include a standard 5# lightweight(blue) recoil spring with our system. Use of other springs may cause coil bind which could damage the system.

Lockup roller pressure can be adjusted by changing springs and spring positions. Included are 5 weak and 5 stiff roller springs. They are easily identifiable by the wire thickness or by finger pressure.

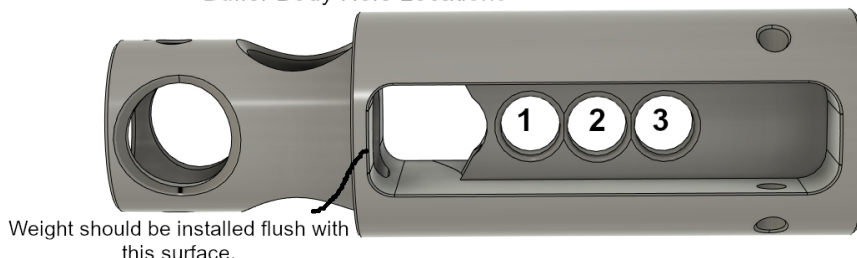
Our buffer body has 3 spring pocket holes (see diagram). You may use a spring in 1 or all of these holes to achieve desired roller pressure and lockup. Spring position greatly affects the roller pressure. A spring in position 1 has much more pressure on the roller than a spring in position 3.

We include a removable weight that can be installed to give more adjust-ability. The weight is threaded into the buffer body under the rubber bumper tip. We recommend adding the weight for hot factory loads or hotter loads with light bullets. To install you must remove the rubber bumper tip by pushing out the 1/8" pin and pulling out the rubber tip. Apply thread locker to the weight and thread it into the buffer body. The weight should be installed flush with the bottom of the hole (see diagram) to prevent interference with the rollers. Reinstall the rubber tip and pin after adding the weight. When installing the weight **always** use loctight and be sure the weight isn't installed too deep and interfering with the rollers.

The RDBS ships with a weak spring installed for ease of disassembly. We recommend starting with a blue recoil spring, a stiff roller spring in position 1, and a weak spring in position 2, for 100rds of break-in before any adjustments. This is my current spring setup for my 130 power factor 145grain USPSA load.

When adjusting, the goal is to find a setting that best matches your firearm and load. Too light of a lockup and the bottoming out of the stroke can be harsh. Too stiff of a lockup can have more initial recoil and cause premature wear of the buffer system. A balance of initial shot recoil, stroke "bottoming out" recoil, and stroke going into battery "muzzle dip" can be achieved.

Buffer Body Hole Locations



Installation:

1. Remove current buffer tube, buffer, stock and spring from your receiver. Remove buffer detent and spring. Keep your castle nut and back plate on hand.
2. Insert recoil spring into RDBS buffer tube. Insert a stiff roller spring into position 1 and a weak spring into position 2 in buffer body (see diagram). Test for smooth compression of the roller arms into the buffer body as improperly installed springs can be pinched and eventually cause issues. Insert buffer into buffer tube until rollers engage pockets in tube. Install your castle nut and back plate on buffer tube.
3. Thread buffer tube into lower receiver about 2 rotations. Install complete upper receiver with bolt onto lower receiver. Continue to thread-in buffer tube until buffer bottoms out on rear of bolt. Back-out buffer tube a partial rotation until tube is in proper up/down alignment. **Proper lockup will allow the rollers to fully extend in to the pockets in the buffer tube while the bolt is held in battery. The rollers should be close to centered in the windows. One thread distance in or out is enough for the system to be out of adjustment.**
4. Lock down castle nut and back plate (install take-down pin detent and spring if needed). We recommend periodically checking the castle nut for loosening