



SCHEEL MFG



Roller-Delayed Buffer System - RDBS Patent Pending

***The system will be hard to rack the bolt until it is broken in. We recommend keeping a chamber flag in the firearm to speed up the break-in of the buffer springs.**

Usage and Adjustment:

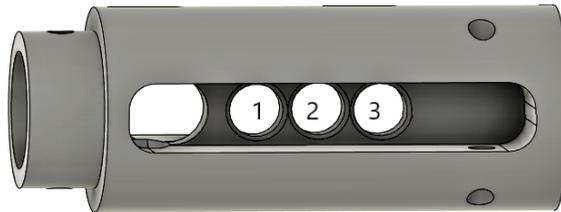
We include a standard lightweight(blue) and an extra-lightweight(white) recoil spring with our system. We recommend only using the blue spring. The white spring is for sub-minor power factor (steel challenge) loads and is not recommended for most users.

Lockup roller pressure can be adjusted by changing springs and spring positions. Included are 4 weak and 4 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.

The RDBS ships with 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 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 short-stroke bumper and 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.

Troubleshooting: email CoreyScheel@hotmail.com

ScheelMFG.com

Note: Some “short-stroke” and “Fast trigger reset” bolts may require short-stroking when used with some aftermarket triggers and our system. This can be achieved by adding a few quarters in the rear of the buffer tube behind the bumper and spring.

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