

Other ideas such as used in Remington's M1100 wherein a portion of gas energy is stored in a moving mass and then later transferred back into the gun has been successful and acceptable as a recoil reducer to the hunter, skeet and trap shooter.

Moving butt stocks which store energy in a spring or hydraulic absorbing means such as the so-called hydro-coil have been attempted but with questionable success. This principle allows the shooter's grip hand to recoil into his cheek with an unpleasant effect as the stock pull length is decreased. Naturally if used with a scope on a high recoil rifle this would result in eye injury.

The most common lowest cost and least effective method is the provision of rubber recoil pads designed with collapsing internal rubber fins. This device made of rubber stores recoil similar to a spring allowing an undesirable fast recovery. An analogy is the motion of suspension springs in automobiles which require shock absorbers to subdue the rebound of stored energy.

An ideal butt pad would be the type that resists compression up to a predetermined pre-load level, then absorbs the recoil without a spring-like action recovering gradually back to normal. *Butt Pad*

Such a device was developed by Remington with the assistance of DuPont-made of polyurethane foam. Tests of this device produced outstanding recoil absorbing characteristics and met the principles previously mentioned.

There were problems of color, matching surface to wood, and if sanded, water absorption. These problems I believe can be solved and if produced correctly would perform superbly far