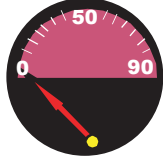


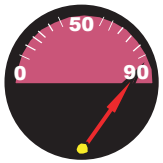
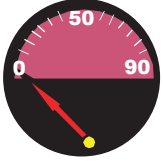
CUSHIONEER (IMPACT ABSORBER)



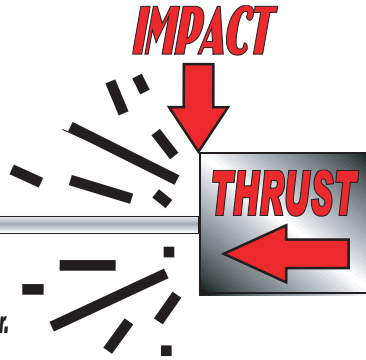
Start of first stroke, rod fully extended waiting for initial impact by the thrust block.



Thrust block moves at high speed up to impact point.



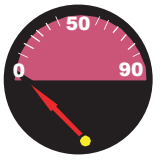
Thrust block impacts the end of rod and begins immediate rapid deceleration controlled by the adjustable or self adjusting Cushioneer. The deceleration curve for the Cushioneer is not linear therefore the block will decelerate quicker at beginning of the stroke than at the end.



RAPID DECELERATION FROM POINT OF IMPACT TO COMPLETE STOP



The block will decelerate quickly at the beginning of the compression stroke and become slower and slower until it comes to a complete stop just before the end of the stroke. Deceleration will be very smooth.



At the end of the stroke the rod will remain compressed until the load is released and the rod extends itself. Cushioners operate in the compression portion of the stroke only.

