

Differences Among Pistons

Terminology

- Compression movement: Shock piston traveling upward toward the top of the shock.
- Rebound movement: Shock piston traveling downward toward the bottom of the shock.
- Tapered piston: One side of the piston face is flat; the other is tapered / angled.
- Flat piston: Top and bottom of the piston face are flat.
- Thin piston: Has a flat profile but is thinner than a standard flat piston.

Difference between pistons

- A flat piston will travel at the same speed in compression as it does in rebound (given equal force is provided in both directions).
- A tapered piston will travel faster in the direction of the taper/angle.
- A thin piston will produce less “pack” than a flat piston.

For example, a tapered piston with the taper facing down will travel faster in rebound than it will in compression, allowing the user to tune the rebound and compression movement independently.

Piston Hole Size

- Larger holes allow more fluid to pass through the shock piston, allowing the piston to move faster through the shock body.
- Smaller holes will have the opposite effect, causing the piston to move slower.

Piston Hole Count

- By changing the number of holes in the piston, a similar damping level can be achieved with different amounts of “pack.”
- Pack is the increased feeling of hydraulic resistance in a shock when the shaft/piston travel through the fluid at a high rate of speed.

