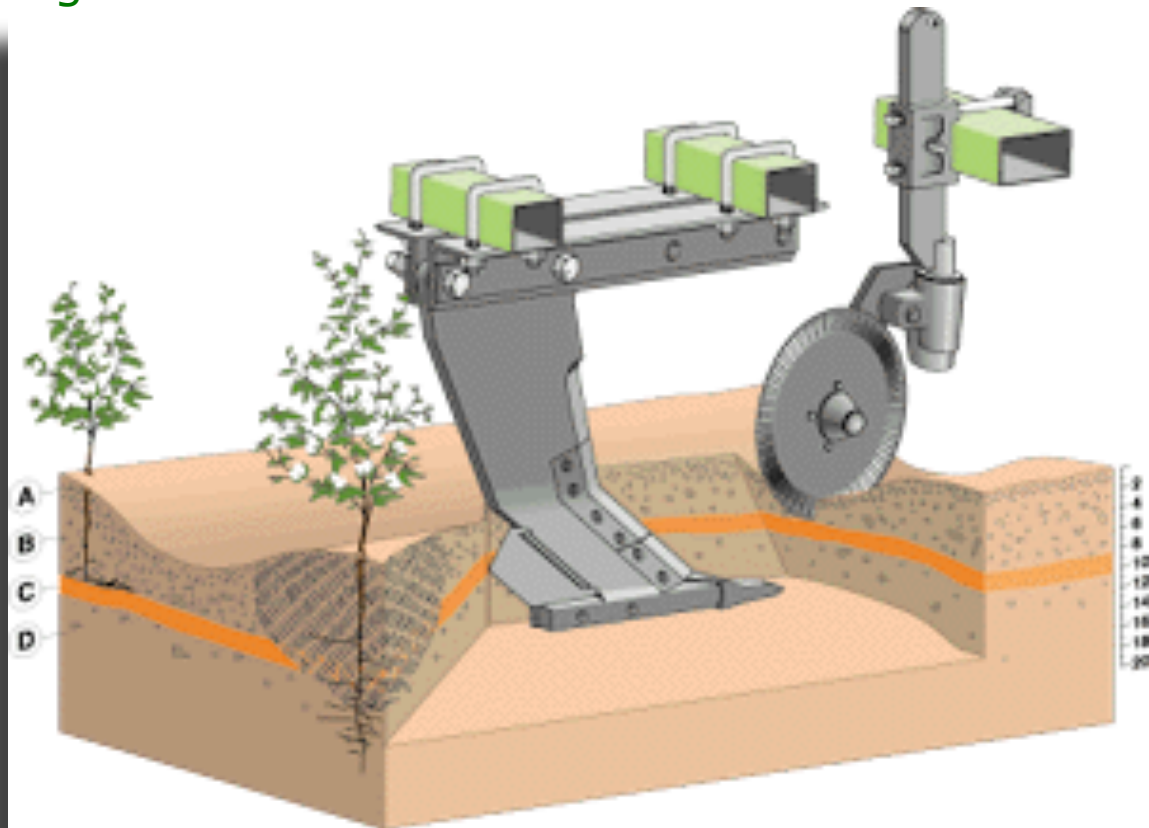


Bigham Brothers® Paratill® Soil Profile



Depth in inches (2.54 cm per

A. Crust:

Soils within the top 5 cm of the soil profile may be compacted. Heavy rains, hailstorms and surface drying can contribute to form a hard crust in the top layer of soil.

B. Partially Compacted Mid-soil:

This soil working zone from 2.5 cm to 25 cm depth may become compacted due to a wide variety of traffic and tillage practices.

C. Hardpans:

In most cases this barrier to subsoil is found from 15 cm to 30 cm below the surface.

D. Subsoil:

Loosening soil layers A through C allows moisture and root systems to penetrate into the subsoil.



Your soil is your greatest asset. It can promote crop growth and high yields or hinder them. The key is soil structure and its effect on your crop's root system.

Root systems grow poorly in compacted and hardpan layered soil because of physical resistance and poor movement of moisture. Compacted soils shed rainfall and detached topsoil as runoff. During dry periods, the hardpan is an impermeable barrier to groundwater reserves.

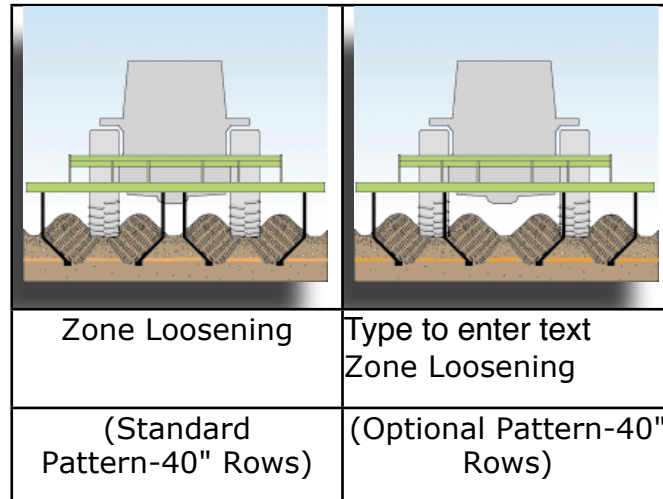
The Paratill improves the root environment by loosening soil to a depth of 30 cm to 43 cm. It breaks hardpan uniformly while restoring the soil's pore system. Spring rainfall can be absorbed, excess moisture drained away and groundwater becomes accessible to roots during dry periods.

The Bigham Brothers Paratill provides these results and leaves the soil virtually undisturbed with basic soil structure intact.

	<p>A major cause of compaction is pressure from today's heavy tractors and farm implements. Repetitive tillage practices compound the problem further.</p>
	<p>Moldboard plowing does not reach deep hardpan layers and can actually build plowpan.</p>
	<p>Tests show that rippers can create zones of compaction at the points and between the shanks. A soft slot in the middle of the seedbed can cause seed depth planting problems.</p>

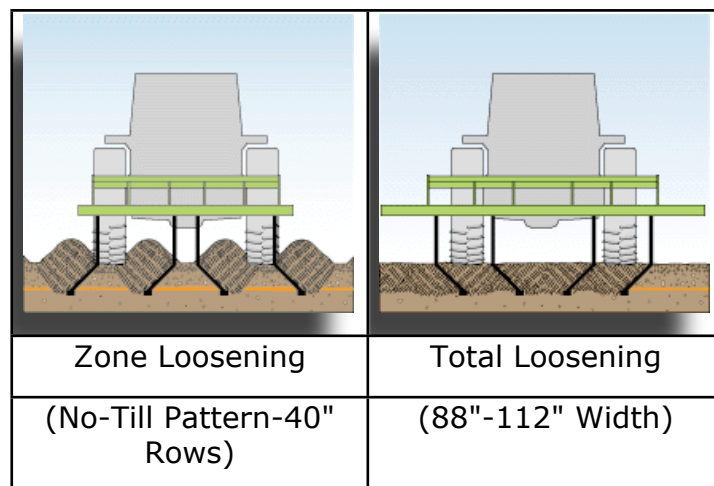


Bigham Brothers® Paratill® Leg Spacings



This leg spacing is suitable for most row crops and leaves furrows firm for skip row irrigations patterns. Each zone is approximately 20" to 28" wide and up to 17" deep.

This leg configuration provides the same basic crop zone loosening results as the Standard Pattern.



Very popular and complementary to No-Till operations. Traffic lanes remain very hard while zones are loosened for crop root growth.

This configuration accomplishes the loosening process across the entire field.