

**Attachments**

ADD as needed for your applications

**S-tines & Shovels (continued)**

S-tines are simple, low-cost tillage shanks that have been on the farm for decades. These are solid for 1) secondary tillage, 2) final seedbed tillage when used with a harrow or 3) mid-to-late row-crop tillage up to 4-5" deep - which may be too aggressive to cultivate close to row. Flexible spring steel is durable in rocky conditions - and flexes around some weeds, if grown too big. Breaks up crusty topsoil but may not penetrate hard ground or pass through heavy weed growth. That these tines "vibrate" for greater tillage action is of questionable value. Excessively flexing tines mean you need a heavier cultivator or primary tillage equipment.

S-tines are not vertically adjustable like most other shanks. S-tines tend to be used exclusively or with a couple other types of shanks so tillage depth is adjusted with the gauge wheels to raise or lower the entire toolbar. Any other shanks may then need to be re-adjusted.

Series 136 S-tines are conventional 7/16 x 1-1/4 spring steel. The 'HC' designation is "high-clearance" for approx 16" toolbar height. 125 Series HD models are shorter for approx 12" toolbar height and not used on this cultivator line.

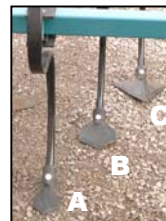
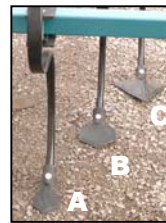
Series 185 does utilize the 12" HD tine but mounted on a vertical shank to enable vertical adjustment of the tine. This is convenient to adjust a few S-tines on a set-ups with several other types of shanks also used.

Series 178 S-tines are relatively new to North America. Our 'HW' designation indicates the same 16" toolbar height plus wider 7/16 x 1-3/4 spring steel, which is stiffer for harder ground or simply greater durability on larger equipment.

**Shovel Size**

S-tines are shaped to throw and mix soil, which helps to bury weeds. How much depends on speed, shank spacing and shovel size - welcome to the art of cultivation! 4" shovels are effective for about any job. 2-1/4" shovels may be preferred close to the row for less soil throw. However, throwing soil into rows - depending on the crop - can cover up sprouting weeds. Wider 7" shovels are effective on rear, centered tines to leave a trough between rows.

Part numbers are itemized on price list



<b>136 Series</b>	
S-Tine Asby, HC 7/16 x 1-1/4 & Clamp	
<b>20136</b>	-- for 2" square toolbar
<b>25136</b>	-- for 2-1/2" square toolbar

- ADD Shovel**
- 11555** Shovel, Reversible Point HD
  - A 11556** Shovel, 2-1/4" HD
  - B 11557** Shovel, 4" HD
  - C 11558** Shovel, 7" HD
  - 11559** Shovel, 9" HD
  - 16398** Shaper Shovel, Left
  - 16399** Shaper Shovel, Right

<b>185 Series</b>	
Adjustable S-Tine Asby, 7/16 x 1-1/4 & Clamp	
<b>20185</b>	-- for 2" square toolbar
<b>25185</b>	-- for 2-1/2" square toolbar

- ADD Shovel**
- 11555** Shovel, Reversible Point HD
  - A 11556** Shovel, 2-1/4" HD
  - B 11557** Shovel, 4" HD
  - C 11558** Shovel, 7" HD
  - 11559** Shovel, 9" HD

<b>178 Series</b>	
S-Tine Asby, HW 7/16 x 1-3/4 & Clamp	
<b>20178</b>	-- for 2" square toolbar
<b>25178</b>	-- for 2-1/2" square toolbar

- ADD Shovel**
- 19556** Shovel, 2-1/4" HD
  - 19557** Shovel, 4" HD
  - 19558** Shovel, 7" HD