

# HOWARD<sup>®</sup> total tillage









# Fastest, Most Economical Means Possible of Preparing Perfect Seedbeds

A unique, two-step total tillage system is achieved by teaming the HOWARD V-CHISEL with wide, high speed secondary tillage ROTAVATORS. It results in a low cost, complete soil management system that produces perfect seedbeds in far less time than conventional tillage systems and with less total power requirements.



## V-CHISEL

Deep and fast! It cuts 12", 15", even deeper into unplowed or compacted soils. Rather than turn rich topsoil under, it leaves it on top, breaking hardpan and leaving a cloddy surface condition that holds moisture and prevents run-off, making it suitable for either Fall or Spring tillage.

**SPIKE-ROTOR** Combines all the basic advantages of rotary tillage equipment, yet is capable of working at much higher speeds, and with far lower power requirements . . . up to 8 m.p.h. with a 60 H.P. tractor! A single pass produces a level seedbed that is ready for planting.

**BLADE-ROTOR** The Model "ST" ROTAVATOR for bigger tractors and bigger acreage! Operating with conventional rotating blades.



The big ST is powered by tractors of 90 H.P. and up, working at 160" or 180" widths. It can also combine planting, fertilizing and chemical incorporation in a single pass . . . preparing and planting up to nine

**HOWARD**  
total tillage  
System



# HOWARD

## V-CHISEL

It is the "V" design of the toolbar that is responsible for faster operation on less power. The lead chisel breaks the way for the next in line, they, in turn, break the way for those that follow, greatly reducing the power requirements. Due to this action, a seven-shank V-CHISEL requires about the same power as a four-shank straight line chisel . . . and the faster you work, the better the job. Because of the chisel shank design, speed



increases the breakout action and makes it work more thoroughly.

Each of the V-CHISEL's hefty shanks is designed to push forward under the ground, lifting hard, compacted soil and fracturing it several feet ahead. The loosened soil, broken into large clods, holds moisture better . . . works up faster in the Spring and gives a mellow soil condition that holds moisture without run-off, and makes seedbed preparation easier.

### Specifications

**Models:** Available in 3, 5, 7, 9, & 11 shank sizes.

**Depth:** Normal from 12" to 15"

**Maximum Depth:** 20". Shank extensions (6" longer) optional.

**Clearance Under Toolbar:** 25" with standard shanks.

Points are replaceable. Each shank individually equipped with shear bolt protection.

## SPIKE-ROTOR



One of the most important breakthroughs in rotary linkage equipment design, the SPIKE-ROTOR replaces conventional blades with spike tines, arranged in a scroll pattern at two inch intervals around the rotor barrel. In this arrangement, the spikes penetrate the soil, fracturing the clods, and mixing soil into a uniform seedbed. A crumble roller following the unit smoothes it to an even finish and provides just the right amount of consolidation without compaction.

Due to its unique action, the SPIKE-ROTOR is able to work at speeds up to twice that of conventional blade systems, and on far less power. Rotor speeds are controlled through the SELECTATILTH gearbox which allows quick change of rotor speeds to alter the tilth from fine to coarse in varying soil conditions.

The use of the SPIKE-ROTOR doesn't end with seedbed preparation. High speed passes for weed control are a natural! With the rear shield up, most weeds are left on the surface with the roots exposed . . . providing the ideal kill condition for inter-row cultivation.

### Specifications

**Tillage Width:** 70", 80" and 90"

**Tractor:** For tractors from 45 to 60 H.P. with 540 or 1,000 rpm P.T.O.

**Linkage:** Category I or II 3-point linkage  
**Tillage Depth:** Adjustable to 8" by crumble roller

**Rotor Speed:** Multiple speeds available with SELECTATILTH® gearbox

## BLADE-ROTOR

The ST designed for secondary tillage operations on large acreage farms, ranches, or specialty operations, saves time and money in seedbed preparation and planting. Once the soil has been prepared with the V-CHISEL, the ST can produce a perfect seedbed in a single pass, at speeds usually reserved for planting. Planters and chemical incorporators can be added, further reducing



passes. In addition, these highly versatile machines are equally efficient for cultivating and bedding operations.

The key to this versatility is HOWARD's exclusive SELECTATILTH system that puts perfect tilth control at your fingertips. SELECTATILTH permits changes in rotor and travel speeds at will, giving the exact tilth needed in any soil condition.

Tillage depth is fully adjustable, and with proper rotor speed, provides the conditions you need for uniform clod size. That means *more* than speed . . . it means your land will be in better growing condition than it has ever been before. ROTAVATION improves the soil structure and produces seedbeds with better moisture retention capabilities.

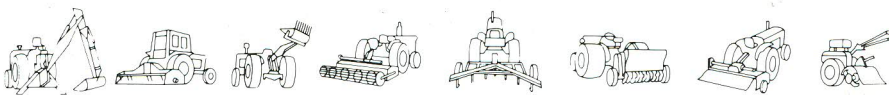
### Specifications

**Tillage Width:** 160" to 180"

**Tractor:** For tractors of 90 H.P. and up with 1,000 rpm P.T.O.

**Linkage:** Category II 3-point linkage  
**Tillage Depth:** Adjustable to 6"

**Rotor Speed:** Multiple speeds available with SELECTATILTH® gearbox



Power-Arm • Rotavator • Rear-Loader • Spike-Rotor • V-Chisel • Turf-Quaker • Rotavator • 350



HOWARD ROTAVATOR CO., INC.  
Harvard, Illinois 60033  
A Member of the Rotary Hoes  
Group of Companies

We reserve the right to change specifications at any time.

Printed in the U.S.A.  
Form No. 647-50-373