

ROTAVATOR MEETS CONSERVATION COMPLIANCE

Let's Talk

One pass with a Howard Rotavator can leave 50 to 60% or more residue on the surface of the ground after planting to be measured. This amount of residue meets or exceeds most residue management plans as part of a total Conservation Compliance program.

WHEN USED PROPERLY, THE HOWARD ROTAVATOR WILL LEAVE MORE RESIDUE ON THE GROUND SURFACE TO BE COUNTED THAN ANY OTHER FULL WIDTH TILLAGE TOOL. IT MAY EVEN LEAVE MORE THAN NO TILL.

In 1912, A.C. Howard built the first Conservation Tillage Tool ever made. The Rotavator was designed to break virgin ground, without turning the soil over. A.C. Howard's 'Rotary Hoe' was designed to undercut all unwanted weeds, grass, brush and root structure free from the topsoil, and leave the residue on the surface so the sun and wind would kill all unwanted vegetation. It was more effective with this objective than any other tillage tool in 1912, and retains that advantage in 1994.

Regardless of the tillage tool, if the objective is to leave as much residue on the ground surface as possible to be measured, as little must be done to that residue as possible. Stalk shredding in the fall may hurt residue levels by making smaller, more easily decomposed residue pieces. Setting the tillage tool to run shallow reduces the chance residue will be buried, as does reducing the number of tillage trips.

Correct adjustment and operation of a Rotavator is essential in order to leave as much residue on the surface as possible. Crop shredding ahead of a Rotavator is <u>NEVER</u> required. A Rotavator will not wrap nor plug when set up and used properly. The Rotavator's depth of tillage must be set as shallow as possible - 3" or 4". A Rotavator's adjustable rear soil shield must be raised as high as possible, or totally removed; this allows the free flow of soil and residue up and out the back of the Rotavator. The soil fines land first, with larger soil chunks and residue remaining on the surface to be measured. Residue is on top of the ground or right next to the surface, to make for excellent water infiltration, and reduced water runoff. All the soil is moved. All unwanted vegetation is undercut and thrown up onto the surface to be killed, measured, and to protect the soil from Mother Nature's excesses.

A ROTAVATOR CAN EFFECTIVELY REDISTRIBUTE RESIDUE THROUGHOUT A FIELD AND IN SOME CASES INCREASE THE PERCENT OF RESIDUE COVER OVER NO-TILL.

Residue from row crops can be considerable, but sometimes remain concentrated in the row. A field with heavy residue in the rows, but light to zero cover in the middle may give a low 'before tillage' percent residue coverage reading. Operating the Rotavator at a shallow depth, rear

shield up, and at a 8% to 15% angle to the row will effectively redistribute residue over the entire field, allowing a higher percent of residue coverage 'after Rotavation'.

As soil and residue is thrown up and out the back of the Rotavator, some soil will invariably fall on the residue. The first rain after planting will wash some of the soil off the residue. Measuring the residue coverage after that first rain will usually produce a higher percent reading than before the rain.

Operating a Rotavator at only a 3" to 4" depth does not take much power. Depending on conditions, speeds of 5 to 7 MPH can be obtained with 8 to 12 HP per foot of width. Output of 10-12 acres per hour is not uncommon working at these depths.

The PTO powered blades push the tractor as well as push soil and residue through the tool. This 'push' allows the Rotavator to do an excellent job in the broadest range of tillage conditions possible. As tillage conditions change, (soil type, amount of moisture, and residue, degree of compaction, etc.) the Rotavator handles the toughest problems with ease, allowing a continued high output in any field, and over the entire farm.

Many Midwest Rotavator users started with Rotavation in the 1950's because it was the only alternative to the moldboard plow. HOWARD was the first company to appreciate the value of residue and the need to keep top soil in its rightful place.

Many Rotavator owners in the Midwest have used rotary tillage for 40 years, and believe it to be the fastest way to get the job done, as well as save soil. Quality in the job still counts. Rotavator owners consistently get equal to higher yields than their neighbors with less tillage and machinery inputs.

A HOWARD Rotavator is the most versatile surface tillage tool on the farm, because it is the most adjustable. The adjustability of the Rotavator allows for controlled tillage. The best tillage is the least tillage; just enough to meet the needs of the crop that will follow. Define the tillage objective then adjust the Rotavator for optimum one-pass performance.

FOR ADDITIONAL INFORMATION ON HOW TO GET THE BEST PERFORMANCE FROM YOUR ROTAVATOR, OR HOW ROTARY TILLAGE CAN BEST FIT YOUR NEEDS, CONTACT GUY MACHINERY.

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