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NIGHTS TO PRODUCE**

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Adelphi Kentucky Bluegrass is, truly, the product of many sleepless nights. The nature of bluegrass is such that hybridization can be achieved ONLY AT NIGHT and, there's no telling what time of night will be the right time.

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Canadian Inquiries: **National-NK Seeds Ltd.**, Box 485, Kitchener, Ont. • **Rothwell Seeds Ltd.**, Box 511, Lindsay, Ont.

Other International Inquiries: **Northrup, King & Co., Inc.**, Minneapolis, Minn. 55413



Technical tests being conducted on typical aerial lift unit.

New company tests aerial lifts

A growing number of accidents are being recorded by users of aerial lift equipment. Nine of every ten such mishaps come about because of mechanical failure. Seldom does the insulation which is designed to protect the operator fail when a high voltage line is accidentally contacted. Insulation is more likely to be fail-safe than the mechanical phases of the unit.

Such are the findings of a new company known as American Safety Test at Morrow, Georgia, formed only for testing and inspecting aerial lift equipment. The units, known by such names as bucket trucks, cherry pickers or aerial lifts, need regular checks and service. Russell W. Tupper and Warren E. Tupper founders of the company, have more than 35 years of experience in working with aerial lift units.

They report owners and operators are almost totally concerned with the insulated components of such equipment and many are unaware of the fact that

mechanical failure is responsible for more accidents.

Their new safety testing and inspection program naturally includes what is commonly known as the dielectric test for both insulated aerial lift components and tools. This is basic, however, they go beyond this with five other major steps — one of which is a loading and stability test.

A third test is the complete analysis of hydraulic oil. Many times after a machine has been in service for an extended period or has been used under stress, the oil contains excess moisture, acid or picks up foreign materials which affect the reliability of the aerial equipment.

Another step and probably the most critical in preventing accidents and reducing costly repairs, is a complete professional visual and operational check of the total aerial lift, accessories, tools and safety equipment.

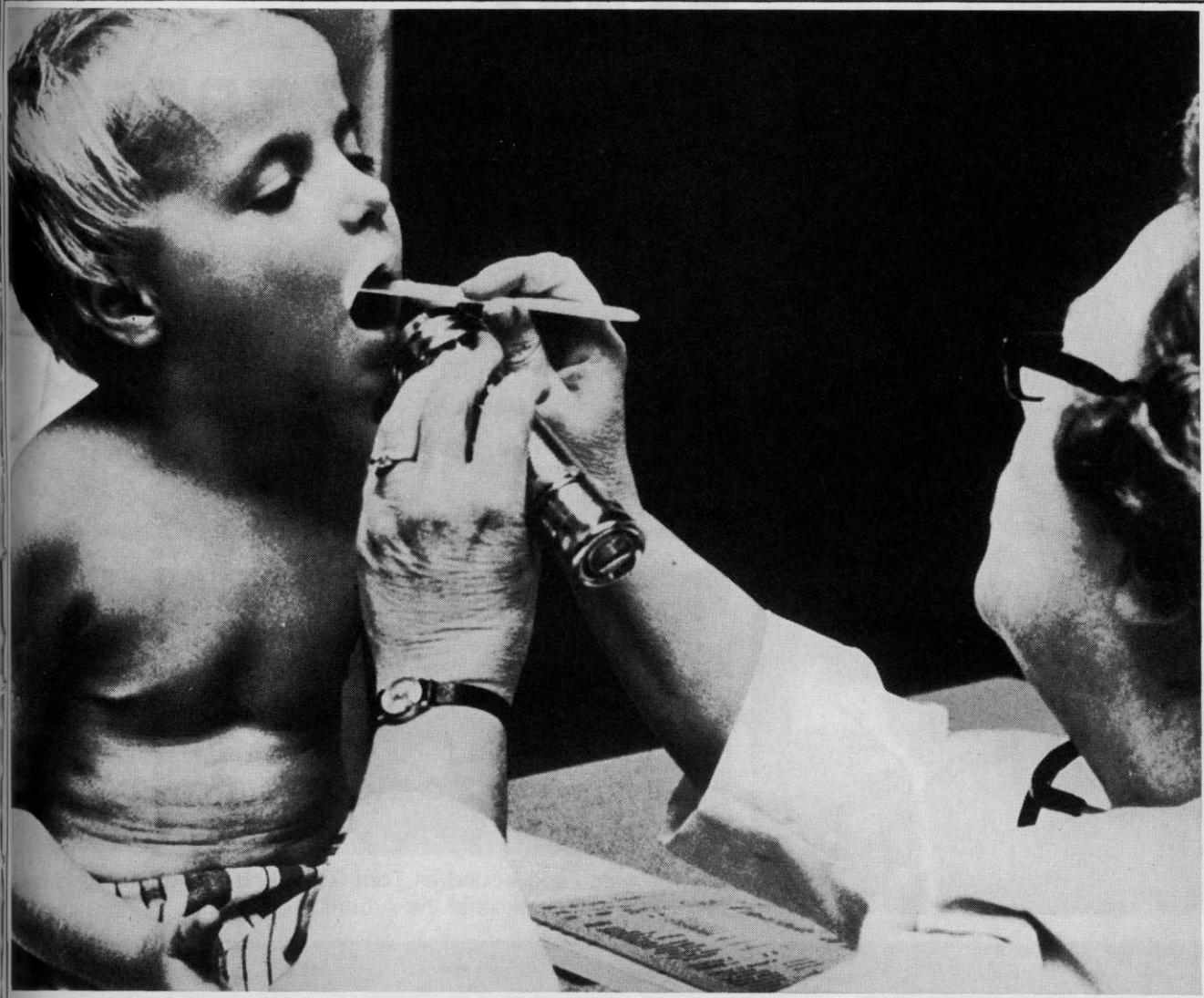
Other steps include a verbal question and answer period with the

operator and crew which confines discussions to safety instructions and proper operation of the equipment. It is important to point out that during these tests and inspections, the inspectors do not in any way convey the negative items to be reported to the operating crew or any other personnel present at the time of the inspection.

The next and last step is a practical and easy to understand report which is given the owners. This is a confidential report and is broken down into separate listings for safety hazards and mechanical discrepancies.

Safety hazards need to be corrected immediately according to AST. Mechanical discrepancies not considered hazardous immediately can be corrected at the regularly scheduled service. The AST officials also point out that the company does not make mechanical repairs or in any way service equipment. There is a test service only — geared to spot potential problems and prevent accidents.

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The focus was on **TREES . . . AND MORE TREES**



Crowds watch spellbound as Tom Gosnell, left, and other field men demonstrate their skills at the Arborists' Jamboree.



"Trees Form an Archway to the Future" was the theme and St. Louis was the setting as nearly 1000 members and friends of the International Society of Arboriculture gathered Aug. 8-11 to talk trees.

It was the 52nd annual convention of the group, formerly called the International Shade Tree Conference. Why the new name? "We wanted to have a name that more closely reflected our purposes of promoting and improving the practice of professional arboriculture," explained Cal Bundy, the group's exuberant executive secretary.

But the name change wasn't all that was new. This year there was more emphasis on field techniques. "Too often when professional organizations meet to discuss new products and practices only the owners and managers are in attendance. We wanted to reach the field people too," Bundy explained.

A reflection of this philosophy and a highlight of the conference was the first International Arborists Jamboree held at the beautiful Missouri Botanical Gardens.

Here, the group's members and families watched spellbound as the world's top field men demonstrated their skills in tree work competitions, including a western-style tree climb won by Tom Gosnell of Santa Barbara, currently the world's champion tree climber.

Outstanding educational programs with an emphasis on trees in the modern urban environment, 33 commercial exhibits and 12 educational exhibits formed the basis of this successful conference. WEEDS TREES & TURF will bring you more on the educational programs in a future issue.

Newly elected officers include: Hyland R. Johns Jr., Willow Grove, Pa., president; Yvon Fournier, Trois Rivieres, Quebec, president-elect; Roy Gustin Jr., Silver Spring, Md.,

vice president; and Dan Neely, Urbana, Ill., editor.

Recognition awards went to Dr. T. T. Kozlowski, Department of Forestry at the University of

Wisconsin, Dr. Cynthia Wescott, retired plant entomologist, Croton-on-Hudson, N.Y., and Edgar G. Rex, retired plant pathologist, New Tripoli, Pa.

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FROM THE CAMPUS

Mulching made easy

The virtues of mulches are more than skin deep, according to Dr. Charles Dunham, extension horticulturist at the University of Delaware. Mulching can control weeds, conserve water and protect plants, as well as add beauty through a variety of available materials.

One benefit provided by mulches is water conservation. They cut evaporation losses by retaining moisture and capture water that would ordinarily run off in hard showers. Plants are protected from splashing mud and dirt that can be a problem to both vegetables and flowers.

There is a diversity of possible mulching materials, mostly organic but also inorganic, such as aluminum foil which is helpful in protecting plants from insect damage. Dunham claims that as long as water can penetrate and the mulch does not pack to exclude air from the soil it should work. Organic mulches break down at different rates and enrich the soil in the process, but if there is a high ratio of carbon to nitrogen a temporary nitrogen shortage can result, necessitating the addition of extra nitrogen. Sawdust and straw will do this.

For flower beds, house and patio, appearance and cost are probably important factors in choosing a mulch. There are some readily available that will enhance the looks of flowers and shrubs.

Bark and wood chips are ideal mulches especially for shrubs and ground covers. They are attractive and long lasting. Use coarser grades for trees and shrubs and finer, smaller sizes for flowers and ground covers. Four to six inches of mulch is needed for long lasting weed control.

Licorice root sold as Right Dress is one of the best mulches for flower beds.

Cocoa bean hulls are available in

some areas. These tend to pack so should not be used more than two inches deep. They also are sometimes toxic to azaleas. However, for many plants they are satisfactory and attractive.

Grass clippings are one of the cheapest and most available mulches. The problem with grass clippings is that used fresh they tend to rot and pack tightly, warns Dunham. This can be overcome by drying the grass first or stirring repeatedly until dry after they are in place. Grass clippings are probably best in the vegetable garden. Straw is also excellent in the garden.

Pine needles are an attractive mulch especially good for azaleas.

Midges for weed control

University of Idaho scientists have released 25,000 insects in the hope they will destroy some plants.

The insects are skeleton weed midges and are roughly the size of fruit flies. The university has imported thousands of them from the U.S. Department of Agriculture's Biological Weed Control Laboratory at Albany, Cal. to combat skeleton weed, a range pest that competes with forage grasses and crops.

"A few years ago there were just scattered skeleton weed plants found in the Payette River canyons around Banks and Garden Valley," said Dr. William Barr, professor of entomology at the university. "Since

then, that small population has mushroomed out all over the canyons between Banks and Lowman and even over into the Stanley Basin."

"The steep terrain in the canyons makes chemical control of skeleton weed dangerous and expensive," said Barr, "We brought in the midges because they have a definite potential for biological control and they're easy to rear. We don't really expect the insects to control the weed completely. But our plant scientists are working with a strain of rust disease that attacks skeleton weed specifically, and we hope that a combination of the insects and the rust will provide some measure of control."

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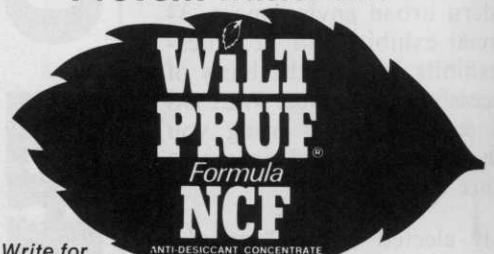
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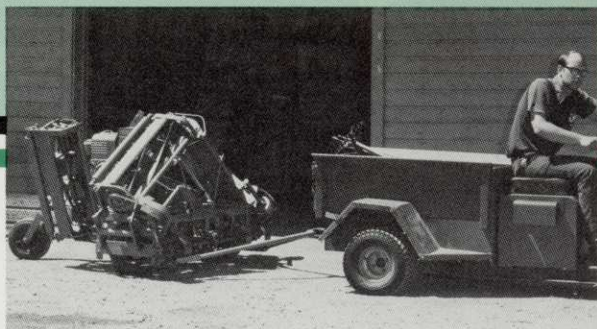
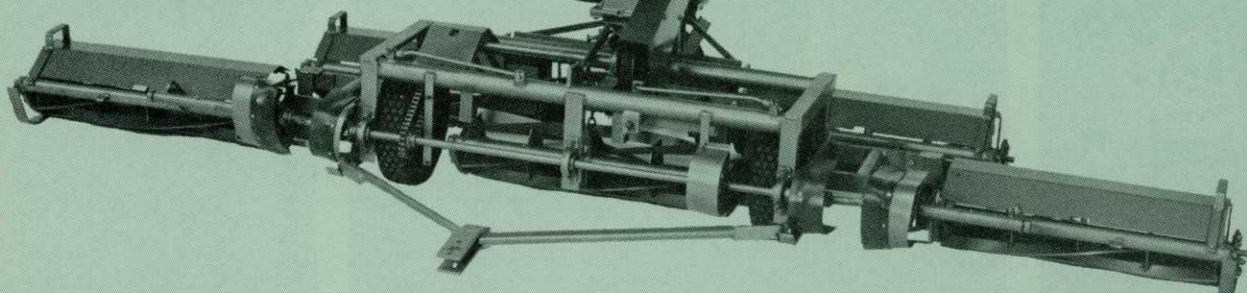
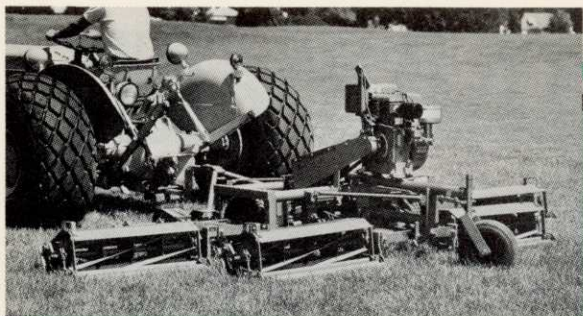
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**PULL OUT
SECTION**

**1977 MANAGERS GUIDE
TO EQUIPMENT AND SUPPLIES**



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National Mower's Power Quint is designed to meet the demands of today's economy. It is priced less than any comparable unit. It is a simple, functional machine without unnecessary levers, gadgets and chrome decorations. It is made so as many parts as possible are standard, off-the-shelf items available from the user's local sources.

Power Quint was deliberately designed to provide its own power source. A feature that allows the unit to be pulled by almost any size tractor with or without PTO.

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1977 Managers Guide to Equipment and Supplies

Making the right decision when it's time to purchase equipment and supplies is one of your most important responsibilities as a manager in the Green Industry.

Wise initial selection, correct accounting procedures for depreciation, effective preventive maintenance and proper major maintenance when needed can save you countless dollars.

To help you with your equipment and supplies selection, WEEDS TREES & TURF presents this Green Industry Managers Guide to Equipment and Supplies.

The Guide has two sections. Manufacturers are listed in alphabetical order along with their equipment and supplies in the first section with advertisers in bold type. In the second section, products are grouped alphabetically with the manufacturers listed below.

Because manufacturers add and delete product lines, change names and are generally never static, omissions of certain manufacturers and/or product lines are unavoidable. Your comments and suggestions are welcomed to help us continue to produce and improve this important service.

A

Ace Pump Corp., 1650 Channel Ave., Memphis, Tenn. 38113
Pumps

Advanced Drainage Systems, 3300 Riverside Dr., Columbus, Ohio 43221

Corrugated plastic drainage tubing

Adventure Line Mfg. Co., 3333 Main St., Parsons, Kansas 67357

Astro hook, crane/ladder, truck mtd., hydraulic
Highworker, platform lift, truck mtd., hydraulic
Tailgate, 1,000 lb. cap. pickup mtd. tailgate

Aeroquip Corporation, 300 S. East Ave., Jackson, Michigan 49203

Hose and fittings, hydraulic, fuel, air, oil, water; pressure from low to super high

Agro Care, 7855-D Gross Point Rd., Shobie, Illinois 60076
Chemical Applicators (granular and liquid); Erosion control materials; Insect killer; Irrigation, Injection equipment; Soil testers; Spray booms; Spray guns; Spray nozzles; Sprayers (cart or wheelbarrow type, complete power unit); Tanks (spray); Tractor (8-12 hp); Trailers; Tree Injectors; Truck (light hauling, utility turf vehicles)

AgTronics Mfg. Co., 1560 State St., Barstow, Calif. 92311
Soil moisture meter

Air-Lec Industries, Inc., Outdoor Product Div., 3306 Commercial Ave., Madison, Wisconsin 53714
Aquatic weed harvester

Air Rake Mfg. Corp., 5 Springfield St., Chicopee, Massachusetts 01013.
Leaf blowers

Alcoa Aluminum Co. of America, Alcoa Building, Pittsburgh, Pa. 15219

Irrigation pipe

Allis-Chalmers Corp., Box 512, Milwaukee, Wisconsin 53201

Model 715 backhoe-loader, Allis-Chalmers 65 hp gasoline engine

Model 816 backhoe-loader, Perkins diesel engine 83 hp

Model 540 articulated loader, 57 hp gasoline or diesel Engines (diesel)

Fork lifts & attachments

Generators

Harrow (spring-toothed)

Leaf blowers

Materials (handling)

Mowers (rotary, sickle bar)

Park equipment

Centrifugal pumps

Saws (chain, gasoline)

Hopper-type seeders

Snow thrower

Tractor (from 8-151 and up hp)

Tractor (crawlers)

Amchem Products, Inc., Brookside Avenue, Ambler, Pennsylvania 19002

Meter Miser, liquid spreader gives precision application of Weedone liquid herbicide products without the need for calibration

Directa-Spray, sprayer end unit.

American Arborist Supplies, Concord Industrial Park, Concordville, Pa. 19331

Arborist supplies

Chippers

American Excelsior Corp., 850 Ave. H, East Arlington, Tex. 76010

Erosion control products

Soil retention products

American Hose & Reel Co., P.O. Box 639, Marland, Okla. 74644

Thermoplastic spray hose with working pressure of 250, 400 and 800 PSI; ¼, ⅜, ½, ¾-inch sizes

Fertilizer applicator tubing; ¼, ⅜, ½, ¾-inch sizes

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American Lincoln Corp., 518 S. St. Clair, Toledo, Ohio
Welders

American Optical Corp., 14 Mechanic St., Southbridge, Mass.
Respirators, protects against harmful, highly toxic sprays, dusts and vapors in insecticides, fertilizers, etc.

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Hearing protectors, protects hearing from damaging or irritating noises of tractors, sprayers, power saws, etc.

Ametek, Inc., 502 Indiana Ave., Sheboygan, Wisc. 53801
Miscellaneous irrigation

Underground enclosures

A.M.F. Lawn and Garden, 3811 McDonald Ave., Des Moines, Iowa 50302

Edgers

Leaf blowers

Mowers (reel, rotary, replacement parts)

Mulch blowers

Snow thrower

Sweepers (lawn)

Tillers

Tractors (8-10 hp)

Lawn vacuums

Amoco Chemicals Corp., Industrial Products Div., 1530

Commerce Dr., Stow, Ohio 44224
 Polyethylene pipe and fittings for irrigation
 PVC pipe and fittings for irrigation
 Corrugated plastic drainage tubing

Anchor Post Products, Inc., 6500 Eastern Ave., Baltimore, Maryland 21224.
 Fences and gates

Andrasko Engineering Co., P.O. Box 4633, Santa Barbara, Calif. 93103
 The Meter Matic, fertilizer injector for irrigation systems

A.O.A. Research & Development, Inc., P.O. Box 6081C, Orlando, Fla. 32803
 Underwater weed cutter (manually operated)

Aqua-Dial, P.O. Box 1325 Newport Beach, Calif. 92624
 Turf irrigation equipment
 Automatic valves, hydraulic and electric, remote control
 Automatic controllers
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Aquamarine Corp., Box 616, Waukesha, Wisc. 53186
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Aqua-Mech Co., 2609 Cedar Springs Rd., Dallas, Tex. 75201
 Aqua Mech, conversion kit from manual valve and key to automatic timed heads

Aquanautics, Inc., 1246 Birchwood Dr., Sunnyvale, Calif. 94086
 Weedrake, underwater air boat

Aquatic Controls Corp., 1203 E. Main, Waukesha, Wisc. 53186
 Weedrake, underwater

Aquatrols Corp. of America, 1400 Suckle Hwy., Pennsauken, N.J. 08110
 Chemicals for turf management

Arctic Mizer Mfrs., Inc., 2116 E. Norse Ave., Cudahy, Wis. 53110
 Arctic Mizer, spreader, self-powered; vacuum-thatcher, self-powered

Ariens Company, 655 W. Ryan Street, Brillion, Wis. 54110
 Ariens Emperor, riding mower — 30" rotary; 8 hp
 Ariens Fairway, riding mower — 26" rotary; 5 and 7 hp
 Ariens S-8 Tractor, lawn tractor — 36" rotary; 8 hp
 Ariens Trac-Team, 26" rotary mower, lawn vacuum, rotary broom on one 8 hp tractor

Armor Metal Products, P.O. Box 822, Helena, Montana 59601
 Anderson Rock Picker
 Rock windrowers (rock rakes)

Arps Corp., 1711 Wisconsin Ave., New Holstein, Wis. 53061
 Arps 728, backhoe, tractor-mounted
 Arps 730, backhoe, tractor-mounted
 Arps blades and rakes, landscaping rakes and utility blades, box scrapers
 Johnson "Work-Horse", front-end loader, garden tractor-mounted
 Arps mini-blades and rakes, blades and rakes for garden tractors

Asplundh Chipper Co., Div. Asplundh Tree Expert Co., 50 East Hamilton St., Chalfont, Penna.
 Chipper, high speed, tapered blade
 Forestry truck, Models L-40, 42, 45, 50; dump body, 12-inch chipper, aerial bucket
 Brush hooks

Atlas Tool — Mfg. Co., 5151 Natural Bridge Ave., St. Louis, Mo. 63115
 Mowers (rotary)

Shredders
 Snow thrower
 Tillers

Atwater Strong Div., Gougler Indus. Inc., P.O. Box 68, Atwater, Ohio 44201
 Blowers
 Sweepers
 Air brooms

Aurora Pump Div., NY Air Brake, 800 Airport Rd., Aurora, Ill. 60542
 Aurora pumps, irrigation pumps, centrifugal and turbine pumps

Austin Products, Inc., P.O. Box 1590, Dallas, Texas 75221
 Augers (earth)
 Blades (dozer-scraper)
 Brush cutters
 Cranes
 Discs (cultivating)
 Earth augers
 Harrow (spring-toothed)
 Hoists
 Mowers (rotary and replacement parts)
 Post hole digger
 Rakes (landscaping)
 Scrapers
 Shredders

Auto Hoe, Inc., Lost Dauphin Dr., Box W121, De Pere, Wis. 54115
 Tillers

Avco Ezee Flow Division, 420 S. First Street, Coldwater, Ohio 45828
 Chemical applicators (granular)
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Avco New Idea, 420 S. First St., Coldwater, Ohio 45828
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 Pruners
 Seeders (hopper-type)
 Snow thrower
 Sweepers (lawn)
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Bar-Way Mfg. Co., P.O. Box 640, Stamford, Conn., 06904
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John Bean Div., FMC Corp., 1305 S. Cedar St., Lansing, Mich.
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