

PRODUCTS



Kawasaki Motors Corp. is now marketing their small air-cooled engines in North America. The small two-cycle engines are from .8 through 4.3 horsepower; four-cycle engines range from 2.3 through 20 horsepower, and larger two-cycle engines are available through 70

horsepower.

All Kawasaki four-cycle engine models are suitable for industrial and commercial use. They include such standard features as: ball bearings on both ends of the crankshaft and camshaft, mechanical governor, stellite-faced exhaust valve, cast-iron cylinder or cylinder liner, and high quality air and fuel filtration systems. All help to increase engine life. The 8 through 20 horsepower models also include counter balance shafts and the 14 and 20 h.p. models have an internal trochoid oil pump.

All two-cycle engines are equipped with ball or needle bearings on each end of the crankshaft, chromeplated or cast-iron cylinder liner and forged steel connecting rod with bushing or needle bearings on each end. All engines are quiet and

smooth running.

Circle 701 on free information card



A new model, featuring a liquid-

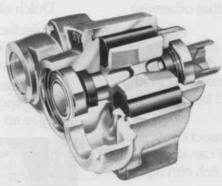
cooled industrial engine has been added to Excel Hustler line of commercial mowers built by Excel Industries, Inc.

The significant difference between the new model 295 and the acre-proven 285 is its engine. Unlike automotive type engines commonly installed on mowers, this 2-cylinder, long stroke Continental engine develops high torque at lower RPM, which adds to engine life and delivers superior performance. Its manufacturer claims easier servicing, lower upkeep, and less downtime; Excel engineers are enthusiastic, viewing it as the ideal choice to meet market demands by groundskeepers whose specs require a liquid-cooled engine.

Dual hydrostats move each drive wheel independently, with twin hand levers that control both the speed and direction of movement, including the start and stop as well as reverse. The big 72" mower can perform intricate turns without time-consuming antics that mark ordinary mower operation; this also relieves operator fatigue, a claim based on input from present Excel Hustler owners.

The line is built with a full safety package, and attachments that permit year-round use of the tractor are available. Excel Hustler mowers qualify for GSA and HUD purchases.

Circle 702 on free information card



A large capacity roller pump capable of delivering up to 80 gpm at speeds to 600 rpm and pressures to 150 psi is being manufactured by Hypro Division of Lear Siegler, Inc.

The Series 1100 pump is designed for operation at 540 rpm tractor power take-off speeds and combines the performance range of multi-stage centrifugals with pressure advantages of positive displacement pumps. It is available with 6-spline

Embark® Plant Growth Regulator

is available at these locations:

Wilbur-Ellis Co. 696 Naplus Street P.O. Box 935 Chula Vista, CA 92012 Attn: Ralph Cramer

Wilbur-Ellis Co. P.O. Box 1286 Fresno, CA 93715 Attn: Don Niboli

VanWaters & Rogers 1363 South Bonnie Beach Place Los Angeles, CA 90023 Attn: Paul Sanders

Moyer Chemical Co. 1310 Bayshore Highway P.O. Box 945 San Jose, CA 95112 Attn: Donald Meyer

VanWaters & Rogers 2256 Junction Avenue San Jose, CA 95131 Attn: Bevan Cates

Moyer Chemical 230 East Dyer Road Unit Santa Ana, CA 92707 Attn: Pat Sano

Wilbur-Ellis Co. 14111 Freeway Drive Santa Fe Springs, CA 90670 Attn: Mike Bell

Walter W. Fuchs Turf Products Limited 2N255 County Farm Road West Chicago, IL 60185

Riley Lawn & Golf Equip. Corp. 6810 Guion Road Indianapolis, IN 46268 Attn: Robert Scobee

The Dalton's Incorporated U.S. 30 East P.O. Box 246 Warsaw, IN 46580 Attn: Don Dalton

W. F. Miller-Co. 1593 South Woodward Birmingham, MI 48011 Attn: Russ Hancock

R. L. Gould Company 3711 Lexington Avenue North St. Paul, MN 55112 Attn: Gordon Miller

Turf Supply Company 2970 Dodd Road St. Paul, MN 55121 Attn: John Kolb

VanWaters & Rogers 3950 Northwest Yeon Avenue Portland, OR 97210 Attn: Romeyn Kruiswyk

Wilbur-Ellis Co. P.O. Box 8838 Portland, OR 97208 Attn: Gordon Hidman

VanWaters & Rogers 8201 South 212th Kent, WA 98031 Attn: John W. Barber

Wilbur-Ellis Co. 1200 Westlake Avenue North Suite 10000 Seattle, WA 98109 Attn: Jack Fisher

Reinders Brothers, Inc. 13400 Waterwon Plank Road Elm Grove, WI 53122 Attn: Ed Devinger



hollow shaft for direct pto mounting or 11/4 inch solid shaft for coupling to

pto tumberod.

The pump's positive displacement design, providing high pressure performance, makes it ideally suited for servicing long dischage lines on transfer equipment and large scale spray rigs which require higher pressures to supply extra boom nozzles and check valves. The pump handles a full variety of agricultural chemicals including plain water. An added benefit is its self-priming ability. It is self-priming to 10 ft. (lifts 22 ft. primed).

Circle 703 on free information card



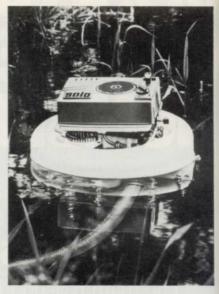
The Off-Set is now offered by

Terrain King Corporation. Off-Set has a cutterhead that delivers a full 5½ foot cut and utilizes a unique float system that allows this cutterhead to follow the contour of the terrain without operator control.

One feature is its exclusive, patent-pending shock absorbing system. This system acts as a release mechanism, allowing the cutterhead to move rearward when obstructions are hit. By doing so, it is both an accident preventor and cost eliminator. The action gives the operator added time to react and avoid sudden, dangerous jolts. And it protects tractor frames and bell housings from costly damage and repairs.

A second feature is the parallel linkage system. This system makes the Off-Set the only machine of its type that can lift the cutterhead over obstructions without tilting the outside edge upward and exposing the rotary blades. It can lift the cutterhead from 5 inches below grade to 13 inches above grade while maintaining a constant relative angle to the ground. This not only means added speed advantages, but overall machine safety.

Circle 704 on free information card



Solo announces the availability of its new Floating Pump, Model 830. Powered by one of the company's time proven 4 hp, 2-cycle engines (92 cc) displacement, 5.6 cu. in., it delivers up to 5,800 gallons per hour (22,000 litres per hour) to a total head of 100 feet (30m).

Encased in a unique plastic floating body; this pump is buoyant



and most important derives the liguid from the cleanest area - only inches below the surface, reducing priming time to almost nil. Suction hoses are not needed. The pump's central intake port is away from mud and grit and a screen protects the internal parts, which are made of high impact plastic.

Weighing only 26 lbs., this pump is easily transportable and was designed for its practicability and

economy.

Circle 705 on free information card





Vertifiers and Aerifiers

MC-5C Vertifier

Fast, straight-in, straight-out coring. Core catcher. High speed. Minimum surface disturbance. Hydraulic lift for easy maneuvering.

JR-3 Aerifier®

Self-propelled aerifier for greens and general purpose. Fast, maneuverable, low maintenance. Scoops out small, pear-shaped, loose-walled cavities to admit air, water, and fertilizer to grass roots.

TM-140 Aerifier®

Easiest, fastest, most maintenance free aerifier. Built-in weight racks. Rigid frame construction. Aerifying spoons or double-point diamond slicing blades available for double duty. Patented Flexi-press springs fit over spoons to prevent turf tearing. Models for 3-point hitch or pull-behind, hydraulic lift.

Ask your Hahn Distributor about other Hahn Turf Products.

TURF PRODUCTS DIVISION 1625 N. Garvin, Evansville, Indiana 47711

Circle 154 on free information card

The newest and smallest member of the Water-Winch traveling sprinkler line is announced by Ag-Rain, Incorporated. The WW-1400M is designed specifically for use on small acreage, and should be of interest for farmers; flower, fruit and vegetable growers; athletic fields and parks; sod farms and golf courses.

Powered by A-Rain's exclusive patented radial inflow turbine drive, the WW-1400M has infinitely variable travel speeds with 1000 foot maximum travel distance. This compact traveling sprinkler has wide flotation tires and uses 21/2" hose that can be reeled onto the built-in hose spool by attached PTO shaft. The WW-1400M has a flow capacity of 60 to 150 gallons per minute and incorporates most of the proven features of the larger Ag-Rain travelers.

Circle 706 on free information card



The new Davis W4, a compact 1/2 yd3 articulated loader with standard features normally found on larger equipment, was recently introduced by The Davis Division at J I Case.

The economically-priced W4 is powered by a standard 26.4 kW (35 hp gross) 4-cylinder liquid-cooled diesel engine, and was designed to handle a wide range of construction and utility loading jobs. Other standard features include 4-wheel hydrostatic drive with mechanical 2speed transmission, a mechanical self-leveling bucket, bucket level indicator gauge, power steering, easy loader controls, and an electric coldstart preheat system.

Center-pivot steering allows 70° total hydraulic articulation - the front and rear wheels always follow the same track. Combined with total frame oscillation of 16°, the W4 provides stable ground contact over

rough terrain.

The new loader has a total breakout force of 2381 kg (5250 lbs) and total hydraulic lift capacity of 2858 kg (5700 lbs) at ground level. Maximum loading height for the W4 with full dump clearance is 3121 mm (91.4").

Circle 707 on free information card Continues on page 87







WE WROTE THE BOOK **ON CONTROLS**

Weather-matic controllers can operate any size sprinkler system effortlessly and automatically, on almost any type of watering program. Our reliable electronic controllers offer automatic, semi-automatic or manual operation; variable timing, 14-day calendar programming, dry indexing: Rain-Stat®: modular expandable and command/satellite models.

THE TURF IRRIGATION MANUAL

A definitive reference book on landscape irrigation just published by Telsco. Copies may be ordered from the factory.



Industries • Box 18205C •	Dallas, Texas 75218
Please send me information	on
() Residential controller: () Heavy-duty industrial () Command/satellite or () Turf Irrigation Manual	controllers ontrol systems
NAME	
COMPANY	
ADDRESS	
CITY	



Massey-Ferguson introduces six new compact tractors designed to meet increasingly important uses for tractors in the smaller size range. The new line features high cubic-inchdisplacement diesel engines ranging from 20 to 31 engine horsepower (16 to 26 PTO hp). Three of the six are among the few four-wheel-drive machines available in North America in this power range.

The six tractors are the 20-hp MF 205, the 25-hp MF 210 and the 31-hp MF 220 plus their four-wheel-drive counterparts, the MF 205-4, the MF

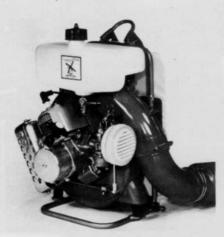
210-4 and the MF 220-4.

The MF 210 and MF 220 twowheel-drive tractors feature adjustable, swept-back front axles as standard equipment. The other four models have standard axles. Differential locks and both hand and foot throttles are standard.

All models are equipped with a 540-rpm, transmission-driven rear PTO with overrunning clutch. Front PTO capability will be available on all models.

The new small tractors feature large-capacity hydraulic pumps. These provide position control for the hydraulic linkage on the MF 205 and MF 210.

Circle 708 on free information card



Vandermolen's new Windmill 55B Backpack Blower features a "tiltproof" fuel tank. The unique shape of the fuel tank with its downward sloping bottom, feeds fuel to the carburetor even when the blower is tilted sideways or forward on the



Tuflex Manufacturing Company Post Office Box 13143 Port Everglades, Florida 33316 (305) 525-8815

line of tanks, write or call now:

Circle 110 on free information card APRIL 1979/WEEDS TREES & TURF



A tough 85cc engine stands behind trimming head and 2 cutting blades.

- Tri-line, heavy duty monofilament trimmer head.
- 11" Tri-Kut weed blade cuts heavy weeds, briars and brambles.
- 10" 44 tooth brush blade (optional) cuts up to 3" diameter saplings at ground level.

HOFFCO-P10-A BRUSHCUTTER/POWER SCYTHE

Offers the same equipment package, but the trimmer head is optional.







The 2 cycle, 22.5cc engine, can be operated in any position. Total wgt. 131/2 lbs.

- 1. Monofilament trimmer head
- 2. 8" Tri-Kut blade
- tooth brush blade





Special merchandising displays available.

CHAIN SAW ATTACHMENT

Also attaches easily to most light-weight chain saws. • 8" Tri-Kut weed blade • 8" 44 tooth brush blade optional monofilament trimmer
Use for overhead tree and brush trimming.

HOFFCO'S "HUMAN ENGINEERING"

he carrying harness and handlebars with anti-vibration grips can be adjusted for the comfort, balance and separates operator from cutting and

1,000 lbs. of pulling power Does the work of 10-20 people 14' of working cable







HOFFCO PH 977-A

A true ONE MAN post hole drill Full wrap-around handles *deadman throttle control and kill switch on handle *Comet auto centrifugal clutch *18.1 power ratio 2 to 8" earth bits *8" ice bit available. Drill to 30" (4' with extension accessory).

HOFFCO PH 1100-A 2-man

4-cycle engine. Special throttle control and auto. centrifugal

Write for free brochures & name of Distributors in your area . . .

DEPT. WTT-379 • 358 N.W. "F" STREET • RICHMOND, IN 47374

Circle 155 on free information card

back of the operator.

The Windmill Backpack Blower is designed for commercial use. The "tilt-proof" fuel tank has over a 1/2 gallon capacity for 2 to 21/2 hours of continuous operation. This blower has the features that professional users want on a backpack blower: powerful airblast, rugged build, dependable performance, and full control of airblast direction.

Circle 709 on free information card



The Model 300 Shredder-Mixer, a high capacity organic materials processor, has been introduced by the Environmental Products Division of Royer Foundry & Machine Co., Kingston, Pa. The new unit is sized for processing topsoil, composted leaves and sewage sludge, peat, and other organic materials.

The all-hydraulic, dieselpowered Model 300 features Royer's patented cleated-belt which provides continuous four-step processing that shreds, mixes, and aerates up to 75 cubic yards of material per hour while automatically separating nonshreddables.

The power system on the Model 300 combines a 58 hp diesel engine with hydraulics to produce smooth performance. Hydraulic controls permit the operator to govern the speed of the conveyor as it feeds material to the shredding belt.

Loaders of 11/2 or 2 cubic yards can be used to fill the shreddermixer's 2.34 cubic yard receiving hopper. In operation a 20-inch inclined conveyor belt, built into the large hopper, delivers material to the machine's high speed, patented shredding belt. Thousands of tempered steel cleats on the belt shred the material in an endless raking action, and discharge it through adjustable, variable sweep fingers. Rejected sticks, stones, woodchips and other trash roll back to a refuse chute for separate discharge. The high discharge of the shredder-mixer permits stockpiling or direct loading of trucks.

Circle 710 on free information card