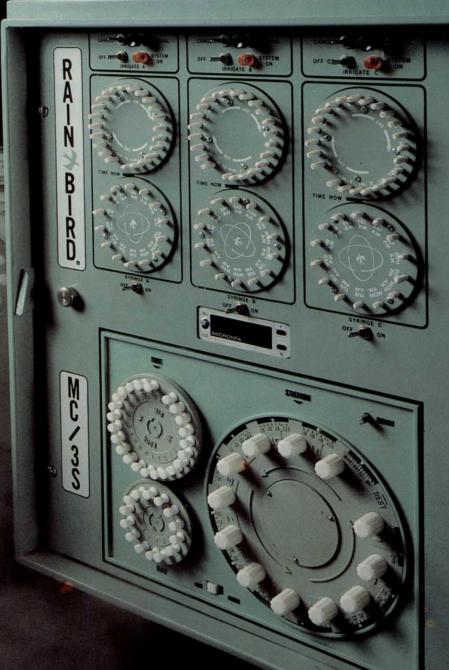


Simple, dependable, foolproof. Based on two of the industry's most reliable controllers ever—the Rain Bird RC-1230 and RC-1260 —our new Miser system combines flexibility and economy like never before. The best of both worlds. Lt starts with three Turf Irrigation Start Clocks, with sevenday calendars and ½ hour starts. Add an RC-1260 type controller module that provides syringe times of 0 to 10 minutes. Next. up to 75—that's right, 75 satellites, each one capable of handling up to 12 separate stations from greens to fairways to roughs. The Miser system doesn't stop there, though. You'll also find plenty of Rain Bird extras to help make your job just a little bit easier. Extras like a digital clock that shows time of day. A flashing, loss-of-power display. Satellite pump starts. Manual override switches for each of three satellite groups. Pedestal mount flexibility. ★ It's a satellite controller system that gets the job done fast, effectively. And more good news—it doesn't take an astronaut to operate it.

INTRODUCING THE MISER SATELLITE CONTROLLER SYSTEM.



AUTOMATIC MASTER CONTROLLER



Miser MC-3S Master Controller

- Three Turf Irrigation Start Clocks with 7-day calendars and 1/2-hour
- RC-1260 type controller module with 0 to 10-minute syringe timing.
- · Individual cancel and manual irrigate switches for each group of satellites.
- · Flashing, loss-of-power display.
- · Digital time-of-day clock.

Miser SC-1230/1260 Satellite Controller

- · "OFF-AUTO" slide switch lets satellite operate independently of Master Controller.
- 14-day, one hour start interval clock.
- 0 to 60-minute timing on SC-1260 and 3 to 30-minute timing on SC-1230.
- · Pump start standard.

FEATURES

Station Capacity per Satellite Unit

4 solenoid valves/station (max.) 1 T-H valve/station (max.)

4 VIH-E valve-in-head sprinklers/ station (max.)

Satellite Capacity of Master Unit

25 satellites (max.) on each of 3 irrigation clocks

75 satellites (max.) on system

Electrical Characteristics MC-3S Master Unit

Input: 120 volt A.C. power – 60 HZ

Output: 120 volt A.C. - 60 HZ

Circuit breaker: 2.1 AMP (holding);

3.0 AMP (break)

Max. current draw: 1.9 AMP SC-1230 or 1260 Satellite Unit

Input: 120 volt A.C. power – 60 HZ

Output: 26.5 volt A.C. - 60 HZ, 1.5 AMP

Circuit breaker: 2.1 AMP (holding); 3.0 AMP (break)

Master valve circuit: 26.5 VAC, 60 HZ

Max. current draw: (120 volt A.C.)

1 solenoid/station: 0.34 AMP

2 solenoid/station: 0.41 AMP

3 solenoid/station: 0.48 AMP

4 solenoid/station: 0.55 AMP 1 TH valve/station: 0.49 AMP Signal wires

Syringe — max. current draw:

0.46 AMP

Start max. current draw:

0.21 AMP

Common – max. current draw:

0.88 AMP

• Dimensions:

MC-3S Master Unit - 161/4" wide x 181/2" high x 75/8" deep SC-1230/1260 Satellite Unit — 111/2" wide x 93/4" high x 63/4" deep

Weights:

MC-3S Master Unit - 45 lbs. SC-1230/1260 Satellite Unit – 12 lbs.

Accessories:

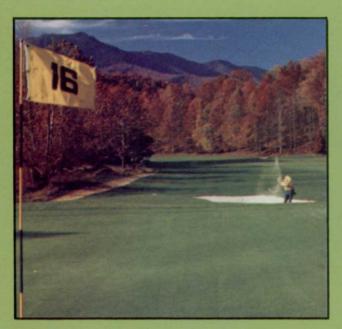
SC-1230/1260 Satellite Unit: PD-7K pedestal mounting kit PED (RC-7A) pedestal and adapter mounting kit

HNICAL

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resistance.





For more information about Penncross or Penneagle write:

Penncross Bentgrass Growers Assn. 1349 Capitol N.E., Salem, Oregon 973O3



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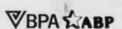
Richard J.W. Foster Vice President



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Dogwood, Redbud, and Other Aristocratic Natives

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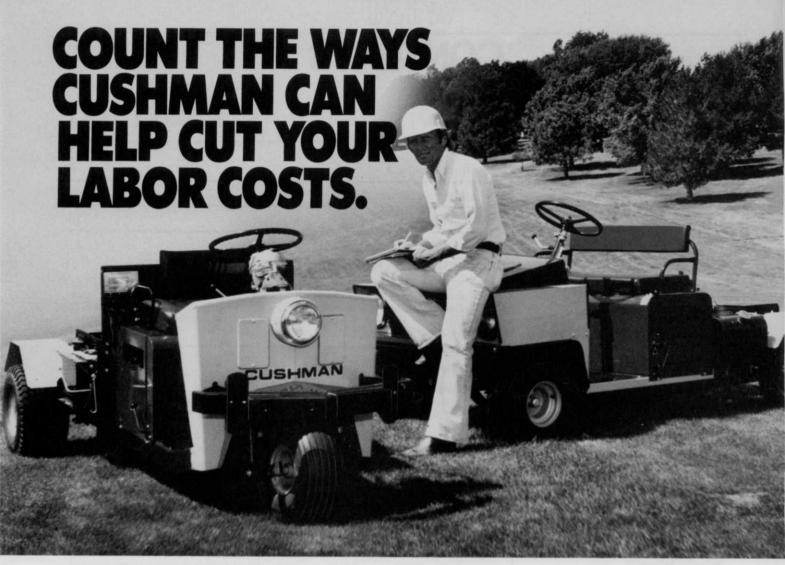












With inflation driving up your labor costs, you've got to find new ways to get more work done in less time.

That's what the Cushman Turf-Care System is all about.

At the heart of our system is the Cushman 3- or 4-wheel Turf-Truckster vehicle. With a rugged 18-hp engine, and a transmission designed to allow the optional PTO to attach directly to it, the Turf-Truckster moves people, tools and equipment quickly and economically.

But the real beauty of the Turf-Truckster is that it also helps your crew finish most turf jobs fast, thanks to a full line of optional

Cushman attachments.

Each attachment secures to your Turf-Truckster's chassis in minutes, through Cushman's pin-disconnect system. You don't bolt or hitch, but just put the attachment in place.

snap-in two or three pull pins and you're ready to hit the turf.

And every optional Cushman Turf-Care attachment is engineered to get its job done neatly and in as little time as possible.

1. GREENSAVER® AERATOR.

The Greensaver lets you aerate greens, tees or other turf areas up to 10 times faster than walk-type units.

It attaches easily to either the 3- or 4-wheel Turf-Truckster. Choose the drum best suited for your turf: 1/2"

Write 121 on free information card

coring tines, 3/8" coring tines or slicing tines—they are all inter-changeable. What's more, both coring drums collect cores as you aerate. Or remove the side plates and return the cores to the turf to be broken up as top dressing.

2. SHORT BOX & FLATBED/BOX.

Your Turf-Truckster becomes a flatbed hauler with just two pull pins in place. Bolt on the optional side panels and tailgate to the flatbed, and you've got a 1,000-lb. capacity*





3. SPRAYER.

It's a 100-gallon polyethylene tank that holds liquids for spraying greens, trees, bushes or roughs quickly and accurately. Team it with the Turf-Truckster equipped with a standard 2 to 1 auxiliary transmission, optional PTO and

ground speed governor for properly controlled spraying.

4. TOP DRESSER.

Compared to self-powered or walk-type top dressers, this unit pays for itself in the hours it can save your crew. A rubber fabric moving bed and rotating

bed and rotating brush are regulated by



the vehicle's ground speed to maintain an even spreading pattern over a $31\frac{1}{2}$ " swath. And the hopper holds up to 1,000 lbs. of material from rock salt to powdered fertilizer.

5. SPREADER/SEEDER.

Mounted on the optional Short Box or Flatbed/Box, its cyclone action spreads up to 300 pounds of seed, sand, salt or fertilizer over areas up to 40' wide. The Spreader/Seeder is powered by the Turf-Truckster's optional PTO with extension shaft. And since all controls are operated from the driver's seat, one man can get the job done.



6. QUICK AERATOR.

We call it the Quick Aerator because its 46" wide swath lets you finish big

aerating jobs fast.
It can also move
from job to job fast,
because it can be

hydraulically lifted by controls from the driver's seat for ground transport (optional hydraulic system and dump set required). Three tine styles are available for different soil conditions: slicing, coring (2 sizes) and open spoon.

7. GRADER/SCARIFIER.

Now you can groom non-turf areas with your Cushman Turf-Care System. Attach the new Grader/ Scarifier to your Turf-Truckster and you're ready to break up compacted dirt on ball diamond infields or golf car pathways. As a professional grading tool, it will keep your grounds even, or create new surfaces. There's a built-on dragmat holder, driver-operated controls and an optional scarifier replacement bar with extra-close



8. POWER CONVERTER.

The Cushman Power Converter turns your Turf-Truckster into a mobile power plant for electric tools, floodlights . . . anything with a universal motor that draws up to 120 volts DC. So, instead of bringing every repair job back to the shop, your crew can handle them in the field. The Power Converter is inexpensive, easy to install and makes your Cushman System even more



9. CUSHMAN RUNABOUT.

If you need a vehicle for moving people and equipment efficiently, consider the Cushman Runabout. Either the two-man 18-hp Runabout, or the one-man 12-hp model. Both give you maneuverability and feature a big pick-up box, and 3-speed transmission. And both Runabout models let your crew get to the job without tying up a golf car that could be on the

course earning a profit.

The Cushman Runabout.
The Cushman Turf-Truckster.
The Cushman Turf-Care System.
They're all designed with the kind of quality you've come to expect from Cushman. And common sense engineering for less downtime, helping you hold down rising operating costs.

If you'd like to see our turf system in action on your grounds, return this coupon. Your Cushman Turf Dealer is ready to demonstrate our labor-saving System to you now.

*Rating for vehicle equipped with 9.50-8 rear tires.
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Sometimes there is no logical explanation for victory when the odds are so immensely stacked against it. All the experts look at individual facts and make a prediction of failure. Such is fairly much the case with our economy.

But, suddenly, by some unrelated event, we see that individual facts are not enough and that experts can be wrong. They forget that in some instances human spirit, determination, teamwork, and a belief in one cause can overcome those negative factors and produce success from near certain failure.

The United States Hockey team, and the Winter Olympics in general, may have reminded us that as a country united under one cause there is little reason why we can't deprive the experts of a severe recession. Can 230 million citizens act as a team? They have during wartime, why not during peacetime? Can we forego selfish interests to help the entire team and thereby help everyone?

On my way to the GCSAA Show in St. Louis, I read a book by Howard Ruff titled How to Prosper During the Coming Bad Years. This is a textbook on economic selfishness, total lack of faith in a country, and how to beat the odds to save your family from possible economic suffering. Forget the rest of the country, look out for number one only. His type of attitude is the surest one to drive us into severe economic problems.

Fight the negative, selfish attitudes being pushed by such authors. Support your local banks and credit unions. Hold back to a reasonable degree your use of credit. Get financial advice and use local savings methods, certainly not foreign ones, although they would probably provide the best return on a short term. Remember, a healthy domestic economy is your best insurance against inflation and recession.

I know it may be termed corny, but be patriotic, show others you care about the team, and invest in its health. Pressure your representatives and senators for fiscal programs which are conservative and designed for long term economic stability. Tell them you want answers this year, before the election. Tell them you want a definite solution to Social Security financing. Tell them you are willing to make adjustments to achieve energy in-dependence. These are the two biggest factors for our domestic economic health. Tell them that you want answers because you are thinking of more than just yourself. You're thinking of the team.



LETTERS

The article in your February, 1980 issue, "Climbing vs. Bucket Lifts: Preferences in Tree Trimming" was a valuable, informative article. Opinions of professional arborists encountering specific and general problems are what make up the continuing advancement of arboriculture as a profession and voicing those opinions is a must if we are to improve the quality of the profession nation wide.

That Mr. Halsted is one of the leading arborists in the area is undisputed. I do, however, take strong exception to his statement that the City of Eugene's arboriculture program has been reduced to a "line clearing"operation.

Mr. Halsted's personal knowledge of the City of Eugene's program and commitment to arboriculture as a profession would have to be limited, since he left the City just 2 months short of 13 years ago.

To begin with, our selection process stresses total arboricultural knowledge, safety, climbing skill, abilities, and aerial lift abilities, in that order. Candidates for a position with our crew are put through a practical exercise involving climbing and aerial lift use. Our contention is, if the person cannot effectively climb, they would be of little use to

Continues on page 72

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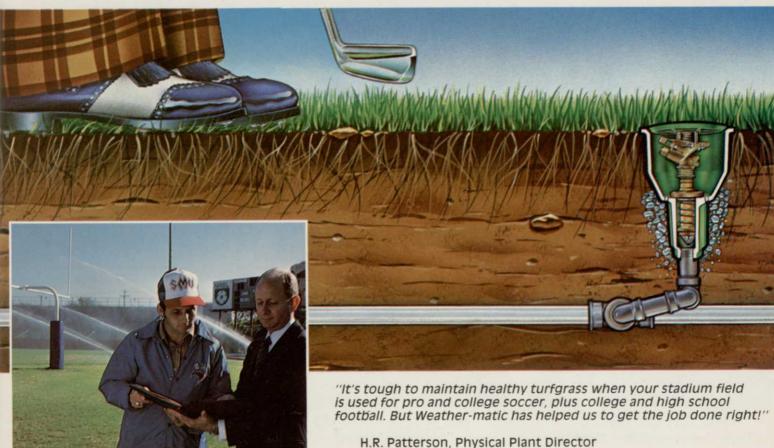
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710	TELEPHONE



Six great gas-power-tough trimmers:



MODEL 1900 High-quality economy trimmer.

Here is famous Green Machine quality and performance built into a new, low-priced 14.9 cc gas-trimmer. Unlike many low-end gas trimmers, The Green Machine Model 1900 has plenty of power—so much power that it comes equipped with two heavy-gauge long-wearing .080 Green Line cutting strings.

Coupled with great engine performance is a simple but effective 2-string, manual-feed cutting head. A TFC™ automatic-feed head is available as an option, as well as a new flexible rubber blade for fast trimming of weeds. Other features of the 1900 include a flexible, enclosed drive shaft, light overall weight for ease of operation, multi-position

molded handle.

SPECIFICATIONS:

Engine Type: Inverted 2 Cycle Air Cooled Cylinder
Type: Single Alum, Alloy Chrome Plated Displacement:
14.9 cc Bore & Stroke mm 27 x 26 Compression Ratio:
6.2:1 Max H.P. (H.P/RPM) 65/6500 Carburetor: Butterfly
Type All Position Ignition: Contact Point Type Clutch
Housing: Direct Coupled Lubrication (Fuel Mixture) 20 to 1
Fuel Capacity: (4L) 42Qt. Shaft: Flex Type
Reduction: None Cutting Head (Std): 5" Dia.
Cutting Swath: 17 in. Weight (with cutting head) 10 lbs
(4.5kg)

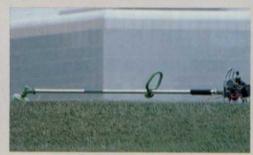


MODEL 2000 Loaded with Power.

This model is equipped with the popular 22.5 cc Green Machine engine. There's power to spare for the toughest string trimming operations. Standard equipment includes the reliable, manual-feed head. You can also use it with the optional TFC™ Tap-For-Cord head. A light tap on the ground automatically releases fresh cutting string. The Model 2000 can also be used with the new fixed-line head (.105 line). Other features include an all-position diaphragm-type carburetor with positive fuel shut-off. Power is transmitted through a rugged, enclosed flexible drive-shaft. As with the 1900, the mid-handle is easily adjustable to the operators height and can be quickly reversed when the unit is used for edging. It's a beautifully built unit, ideal for those that want additional power and efficiency.

SPECIFICATIONS:

Engine Type: Upright 2-Cycle Air Cooled Cylinder Type: Single Alum. Alloy Chrome Plated Displacement: 22.5 Bore & Stroke mm: 32 x 28 Compression Ratio: 6.5:1 Max H.P. (H.P/RPM) 1.2/6500 Carburetor: Slide Type All Position Ignition: Contact Point Type Clutch Housing: Direct Coupled Lubrication (Fuel Mixture) 20 to 1 Fuel Capacity: (6L) .640t. Muffler: Spark Arrestor Shaft: Flex Type Reduction: None Cutting Head (Std) 5" Dia. Cutting Swath: 18 in. Weight (with cutting head): 11 lbs



MODEL 2500
A great string trimmer—and more.

Powered by the proven 22.5 cc engine, here is a string trimmer-that's more than a string trimmer. Model 2500 comes equipped with a new Universal TFC™ head for fast, efficient grass and weed trimming. Just switch to one of the optional quick-change metal blades and you've got a great brush cutter or tree pruner. The performance of this unit in tough brush and pruning operations has to be seen to be fully appreciated. The brush blade lets you cut through heavy brush and vines up to 34 inch in diameter. The saw blade, used with a combination chopping/sawing action can slice easily through branches up to three inches in diameter. It is equipped with a straight solidsteel shaft with spiral-bevel gears. Four optional heads are available for this unit-see chart on back page.

SPECIFICATIONS:

Engine Type: Upright 2-Cycle Air Cooled Cylinder Type: Single Alum. Alloy. Chrome Plated Displacement: 22.5 Bore & Stroke mm: 32 x 28 Compression Ratio: 6.5.1 Max H.P. (H.P/RPM) 1.2/6500 Carburetor: Slide Type All Position Ignition: Contact Point Type Clutch Housing: Direct Coupled Lubrication (Fuel Mixture) 20 to 1 Fuel Capacity: (.6L) .64Qt. Muffler: Spark Arrestor Shaft: Solid type 8mm Reduction: 1.26 Gear Drive Cutting Head (Std) 5" Dia. Universal TFC Cutting Swath: 18 in. Weight (with cutting head): 13 lbs (5.9kg)

* Blades and blade guards shown in top photo are optional items

Fuel mixture ratios shown in specifications are with conventional 2-cycle oils. For convenience and long engine life we recommend ONE-MIX*, the great new multi-ratio oil processing the convenience and long engine life we recommend one-mix*.