STRANGER IN A STRANGE PLACE

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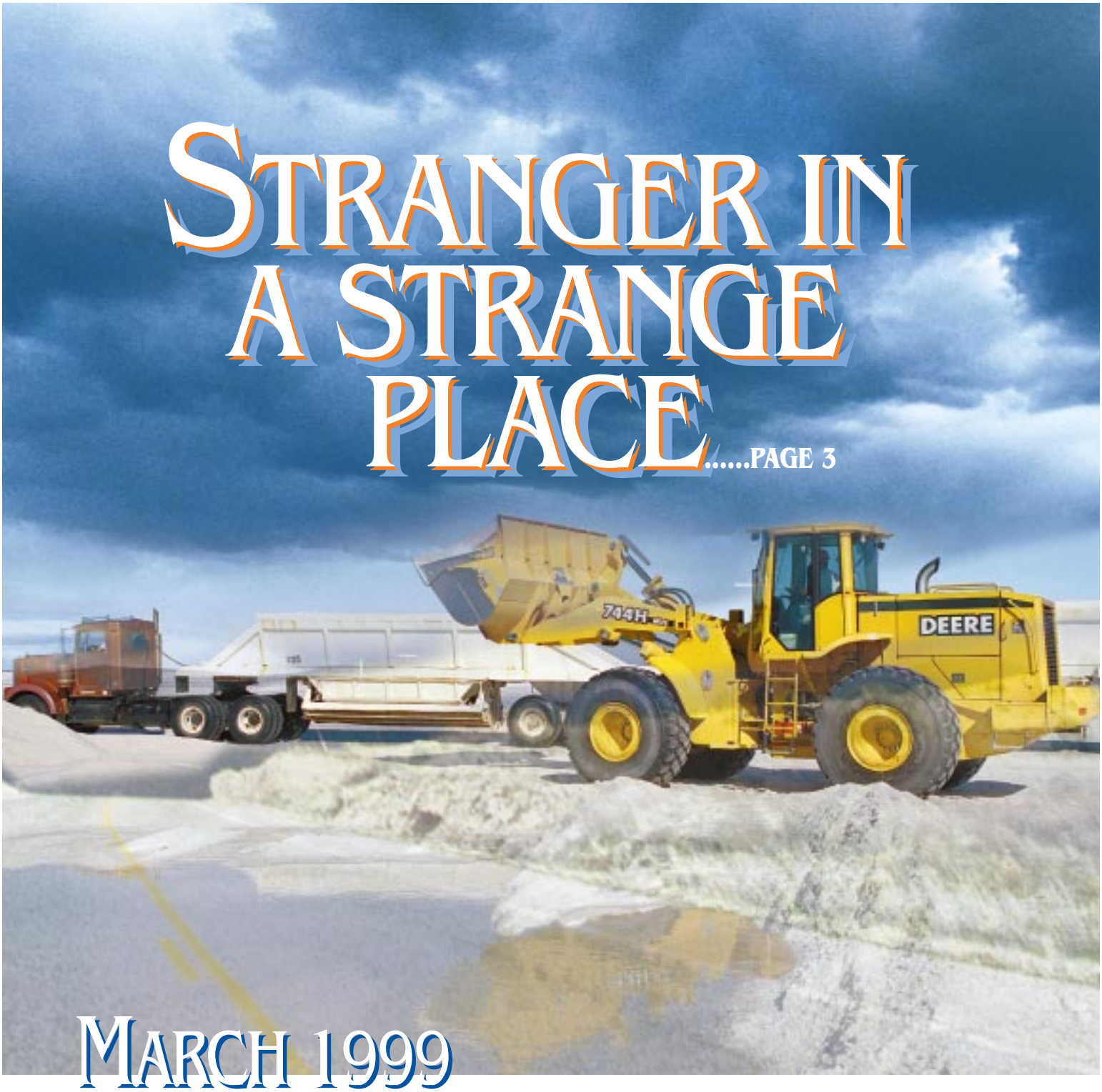

MARCH 1999

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AUTOLUBE...

Already the fastest and easiest to lubricate, John Deere machines can get even faster and easier thanks to the efficiency and dependability of automatic-lubrication-system technology.

"The concept of an auto-lube system is fairly simple," says Drew Cherven, manager of mobile markets at Lincoln Industrial, St. Louis, Missouri. "It's tied into a machine's ignition. As the machine operates, a small, fresh shot of grease is sent to each lubrication point continuously.

"Time is the adjustment," he adds. "You can set the pump to come on after one hour, two hours – all the way up to 14 hours. And, you can set the amount of time the grease is pumped, usually from two to 12 minutes. These adjustments are preset before a machine leaves the dealership. All you do is fill up the system every week or two.

A loader might be set to auto-lube every hour for 10 minutes, while an excavator might be set to lube every hour for 12 minutes. Harsh working environments may demand an even greater grease supply.

"Manually, someone might pump a gun until grease squeezes out and falls on the ground," Cherven explains. "Automatic systems are designed to provide just the right amount to each component according to the need. You don't waste grease. You don't pollute the jobsite or your maintenance shop."

Auto-lube systems will set you back a few bucks – are they worth it?

You might pay $5,000 to $6,000 depending upon the type of machine. Auto-lube installation takes about a day and a half. That's not bad considering there're usually 18 grease points on an excavator, 22 on a wheel loader, and 50 on a motor grader. The auto-lube hardware also can be integrated into scrapers, backhoes, and a host of other construction machinery.

Cherven says customer focus-group feedback and other sources of information collected by his company indicate there may be as much as a $14,000 cost savings annually in machine maintenance and time-savings after an automatic system is installed.

"I don't mind spending a little up front," says John Pitts, Jr., part owner of E & A Materials, Wichita Falls, Texas. "We're trying to save the cost of labor down the road."

Pitts' machine is in blowing or wet sand for a 10-hour work shift. His operator loads out concrete-sand and other aggregates with a 5.75-yard bucket.

"It's a pretty harsh application," Pitts explains. "Over time we will get a lot of grit in our machine through manual grease fittings. This is totally enclosed – that's important. The theory behind the auto-system is wonderful for us.

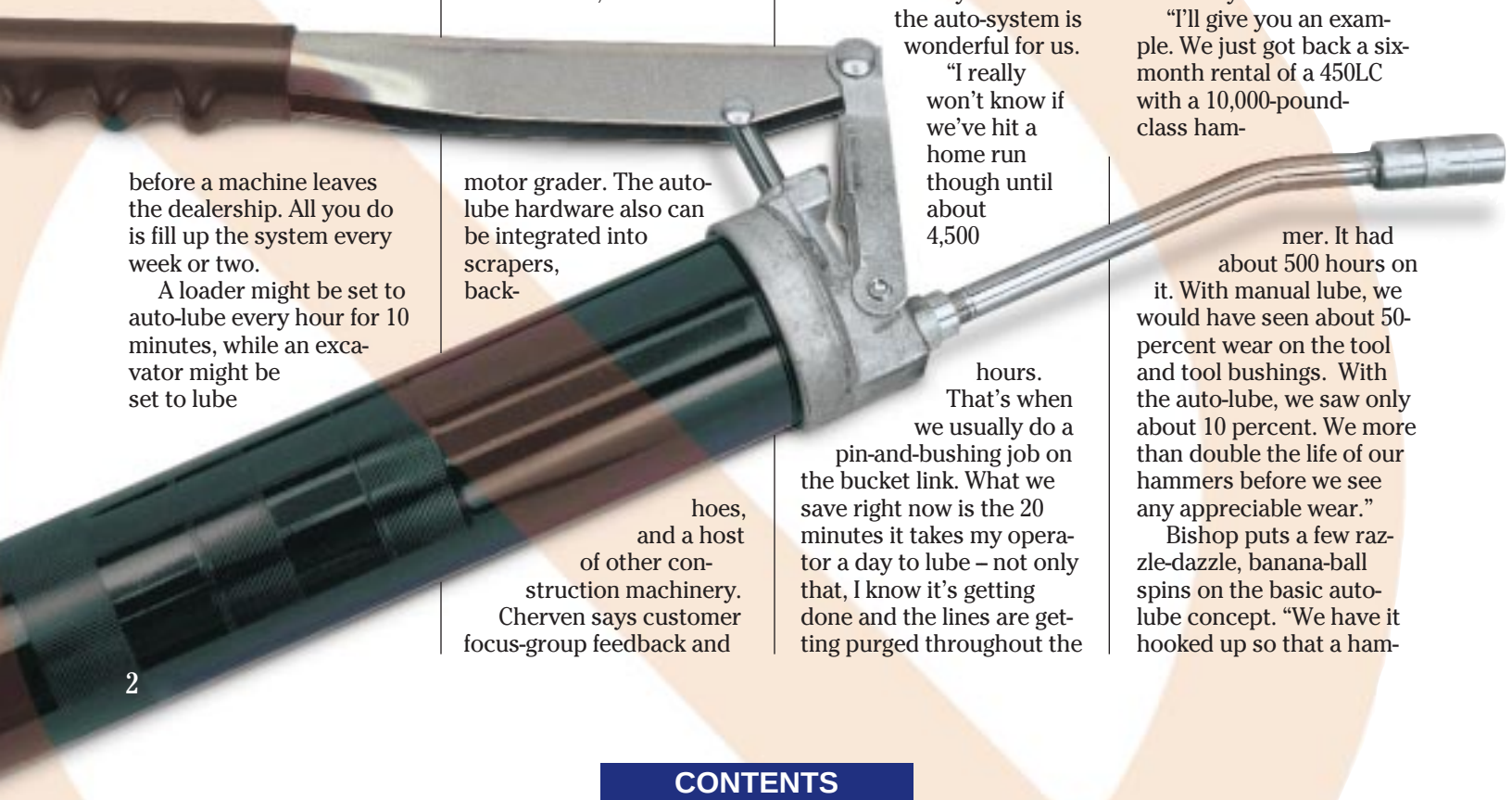
"I really won't know if we've hit a home run though until about 4,500 hours. That's when we usually do a pin-and-bushing job on the bucket link. What we save right now is the 20 minutes it takes my operator a day to lube – not only that, I know it's getting done and the lines are getting purged throughout the day, not just every 10 hours. My operator loves it because he doesn't have to wallow around in the mud and the cold.

"I'd say right now, we have hit a triple with our new system," Pitts concludes, "Everything is nice and tight in the pins and bushings so far. If we can get another 2,000 trouble-free hours, the system will more than pay for itself."

Auto-lube systems aren't just for machines, either, explains Tom Bishop, Doyle Equipment Company's product support manager in Cranberry Township, Pennsylvania. "We put them on any hammer that's a 2,500-pound class or above in our rental fleet. We've been doing that for the past three years and have equipped about 40 machines so far. I can't say enough about what they can do.

"I'll give you an example. We just got back a six-month rental of a 450LC with a 10,000-pound-class hammer. It had about 500 hours on it. With manual lube, we would have seen about 50-percent wear on the tool and tool bushings. With the auto-lube, we saw only about 10 percent. We more than double the life of our hammers before we see any appreciable wear."

Bishop puts a few razzle-dazzle, banana-ball spins on the basic auto-lube concept. "We have it hooked up so that a ham-



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an investment that saves money

mer shuts down completely whenever the reservoir goes dry. It won't work 'til the operator fills it up.

"We can put an auto-lube on any customer's hammer for about $1,800 to $2,000," Bishop figures. "It doesn't make sense to operate a $130,000 hammer that pounds up and down 500 times a minute all day, or any demolition tool for that matter, without it."

Walt Aust, who is the lead mechanic at Weyerhaeuser's Raymond, Washington, sawmill, agrees. He evaluates the auto-lube concept from a totally different perspective – behind a 16-pound sledge hammer.

"If you've ever had to tear down a machine – pound out rusted or scalded pins, or tight bushings – you'll appreciate an auto-lube system," says Aust. "Most of the time, you can use a ball-peen hammer to pop parts out of the machine if they've been lubed regularly throughout the day.

Aust says he added the lube system to the sawmill's 744H log- and material-handler because the technology has proven itself in the woods on other machines and with other mechanics in his company.

Deere is helping advance the auto-lube concept and make it even more compatible with the variety of applications that its machinery, like Aust's and Pitts' 744Hs, face every day.

Systems manufacturers are supplying installed hardware to the company's Sales and Demonstration Site in Coal Valley, Illinois. Site personnel are evaluating the types of guarding and overall plumbing routes necessary for supply tubes and manifold valves. Exposed hardware won't stand up to the day-to-day punishment some Deere machines face.

"We've crushed some tubing in the past," explains site manager, Vic Pierrot. "We have done most of our work placing and guarding the tubing and manifolds.

"We know that it is very important to follow all lubrication schedules in the operator's manual. Lack of lubrication is the biggest cause of machine wear.

"That's especially true on an excavator boom foot where it pivots on the housing," continues Pierrot. "If that ever gets scored from lack of lubrication, no amount of grease on earth will ever solve the problem.

"About all the maintenance you need to do with one of these automatic units is to walk around the machine doing a quick visual check every day to make sure the system is supplying lubrication and your machine is in good shape," concludes Pierrot.

Certified suppliers of automatic lubrication systems can be found in the company's John Deere Attachment and Custom Engineering Guide – 11th Edition. Contact your John Deere dealer for more information.

Controls on auto-lube systems can be housed in the pump or remotely mounted, depending upon the manufacturer.

Three controls usually regulate an auto-lube system. One sets the number of hours between intervals, a second regulates the time the system pumps grease at every hour-interval, and a third is a manual override test says Vic Pierrot, manager of the Deere Coal Valley, Illinois, Sales and Demonstration Site. Controls can be located on the pump or at a remote setting, depending on the manufacturer.

Indicator pins move up and down when grease is flowing to give the operator a visual verification the system is working.

COST JUSTIFICATION
for an automatic lubrication system

- Increased machine component life
- Manual labor is reduced to visual inspections of the machine
- Increased operator convenience and comfort
- Less grease in the environment
- Easier maintenance of machine components
- Lubrication schedules are followed more closely
- Human error is eliminated