

# Green Magazine

*The monthly magazine for JOHN DEERE enthusiasts*

JANUARY 2004



\$4.00

## FEATURED MODEL

Richard Hain

# Model "M"

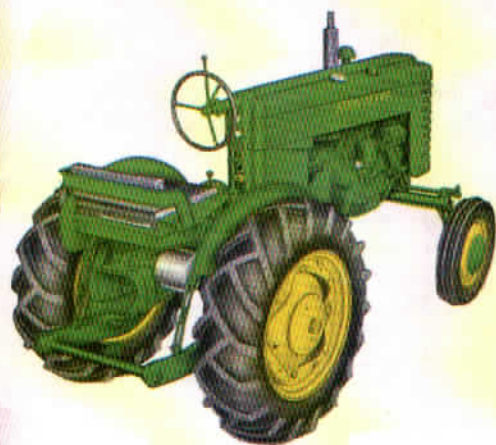
It featured Quik-Tatch system,  
plus new comforts for operator

In March 1947, production began on the model "M" and the new little tractors rolled out the door to an eager public.

For more on the model "M" story,  
turn the page.

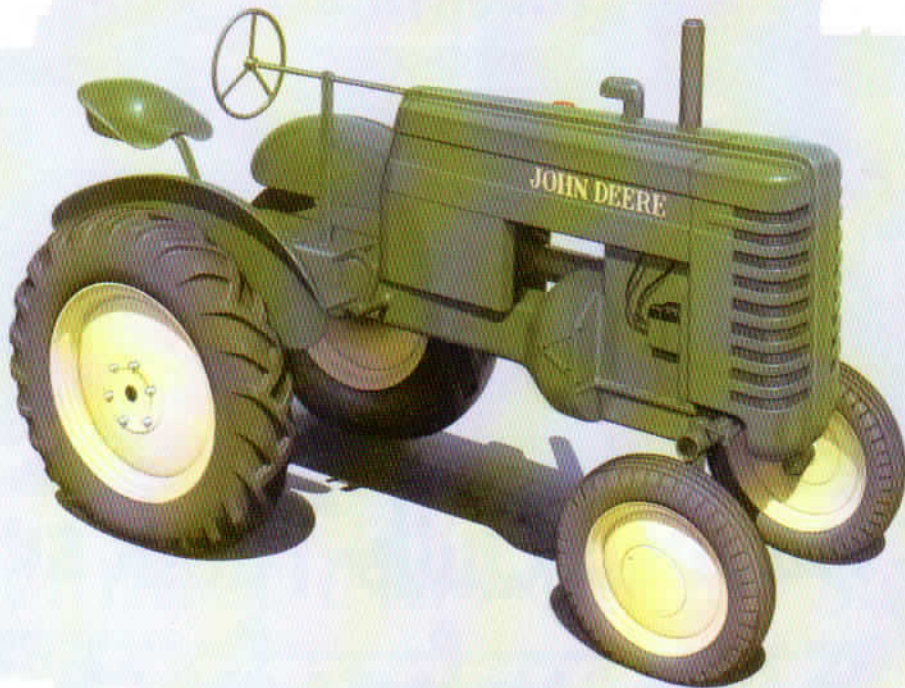
*"It's so easy to handle ... we all do good work with the Model "M"*

### *The Model "M"* BRINGS YOU:



- Balanced* POWER
- New* CONVENIENCE
- New* COMFORT
- Wide* ADAPTABILITY
- New* EASE OF OPERATION
- Many* TIME- AND MONEY-  
SAVING FEATURES
- New* SPEEDS
- Top* QUALITY OF  
CONSTRUCTION
- New* FARMING SATISFACTION





**This sketch was rendered by Roland Stickney for Henry Dreyfuss in 1940 to show how a new, yet-to-be-named John Deere tractor might be styled.**

From the late 1930s through much of the 1940s, Deere and Company offered three different models which were very similar in horsepower, but very different in almost every other way. These models were the "H" and the "L" series models "L" and "LA."

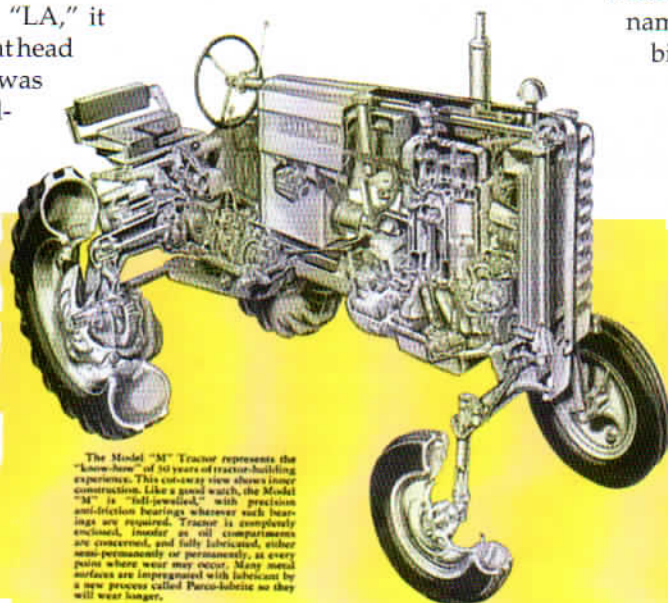
Both tractors churned out about 14 horsepower—but on the "LA," it was a two cylinder vertical flat head engine, while on the "H," it was the more traditional two cylinder horizontal. The "H" was built in Waterloo, the "L" series on the other side of the river in Moline. With three different models in this small horsepower class, Deere was poised to make a big splash in the market. However, a couple of guys named Henry Ford and Harry Ferguson had different ideas!

The Ford model "9N" made its debut in the summer of 1939.

While competitors derided it as being too small and too low with the cultivator on the wrong end, once it was demonstrated, farmers were very willing to part with \$585 to take one home. Over 306,000 examples of the "9N" and its successor, the "2N," were sold

in the eight years from 1939 to 1947. By contrast, it would take Deere 17 years to sell that number of their most popular model, the "B."

Deere officials could quickly see that something needed to be done and work began on a new tractor which, when first tested in 1943, was given the name, the "69." The tractor borrowed bits and pieces of what Deere felt were the strong points of competitors such as the aforementioned Ford, the Allis Chalmers model "B" and the Farmall model "A." In order to insure a design that would allow for more versatility and a better view of the crops, it was decided that a vertical engine would be used and of course, to keep in step with the current company line that two cylinders were better than four or six, it would be a two cylinder engine. However, it was a substantially different two cylinder vertical than what



The Model "M" Tractor represents the "know-how" of 50 years of tractor-building experience. This cutaway view shows inner construction. Like a good watch, the Model "M" is "self-lubricated," with precision anti-friction bearings wherever such bearings are required. Tractor is completely enclosed, inside an oil compartment, are concealed, and fully lubricated, either semi-permanently or permanently, at every point where wear may occur. Many metal surfaces are impregnated with lubricant by a new process called Parco-lubrite so they will wear longer.



**A 1944 "M" prototype: This one has a magneto and "H" style hydraulics. The door on the hood is for a gas starting tank for the all-fuel engine.**



**An internal Deere document referred to this tractor as an "MTN," though to most everyone else, it's an "MT—whether it has a single, dual or wide front.**

the "L" series tractors used. The engine now had overhead valves, an oil filter and a 4 inch bore and stroke which displaced a hefty 101 cubic inches.

Two other important features of the model "M" had to do with operator comfort. In what was likely an industry first, the steering wheel could be adjusted in or out a full 12 inches to allow for greater comfort for the operator. This telescoping feature could also be used to get the steering wheel out of the way when mounting or dismounting—a process that wasn't the easiest on a model "M." The seat cushion was likely also a first in the tractor industry. Rather than foam or springs, the cushioning came from an adjustable air bladder.

The big story, though, was the "M's" new "Quik-Tatch" system, Deere and Company's answer to Ford's three-point hitch Ferguson System. Deere engineers took pains as to not infringe on what they thought were the impenetrable patents of Ford and Ferguson. Deere's version had the implements hook to a bar which ran between the parallel lift arms of the tractor, while the third point of connection was underneath the tractor. As might be expected, Deere also introduced a complete line of implements to fit its new hitch. The new "Touch-O-Matic" hydraulic system controlled the hitch.

Most of the research work and preproduction on the "M" took place at the old Wagon Works building in Moline. However, it was apparent that when full scale production began, better facilities would be needed. So in 1945, Deere bought an expanse of land near Dubuque, Iowa and soon thereafter began construction on a new factory.

In March of 1947, actual production on the model "M" began and the new little tractors began to roll out the door to an eager public. The last "L" series tractor had been built

in Moline in August of 1946 and the last "H" in Waterloo in February 1947, so there was some pent up demand.

The tractor that should have replaced the "H," the new "MT," would not be ready until December of 1948. It's generally assumed that the "T" in "MT" stood for tricycle, which confuses some beginners when they see an "MT" with a wide front. Maybe we should instead think of the "T" as standing for "tall" so that the letter fits the tractor whether it has a wide front axle, dual narrow or single narrow. The "MT" also had another new feature, the "Dual Touch-O-Matic." This system allowed for independent control of front and rear implements.

Early on, a prototype "M" chassis was shipped to the Lindemans in Yakima, Washington to see if it was suitable to be made into a crawler. The result was the "MC" which, like the "MT," started being produced in De-

ember of 1948. In one of the more unique processes in Deere's tractor manufacturing history, final assembly of the "MC" took place in two places. Chassis were shipped from Dubuque to Yakima to be fitted with tracks and tracks were shipped from Yakima to Dubuque to be fitted on chassis.

Many people fail to consider that another small Deere tractor ceased production just before the "M" was introduced and that tractor is the "BR." While many would cite the vast array of differences between the "BR" and the "M," and they would have a point, it can't be denied that along with the "LA" and "H," it was another tractor in the same horsepower range that could no longer be bought. The place this was noticed most was in the industrial market. While this had never been a large market for Deere, the industrial version of the "BR"—the "BI"—did have its following and, hopeful that

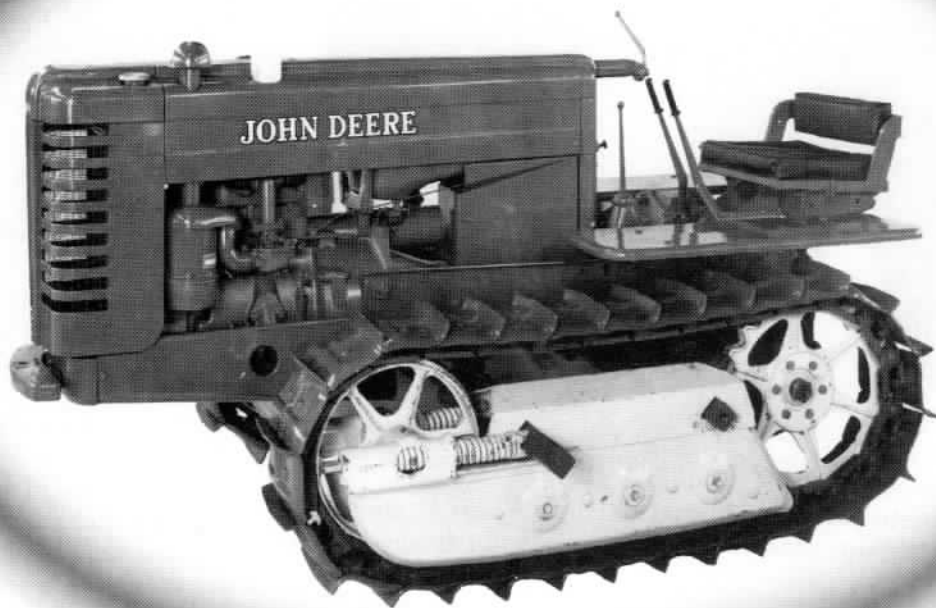
### "M" Nebraska tests

Model	Test #	Belt HP	Drawbar HP
"M"	387	20.45	18.15
"MT"	423	21.6	18.8
"MC"	448	22.2	18.3

the market could be expanded, Dubuque introduced the "MI" in November of 1949. Basically, the tractor was an "M" with shortened front spindles and the final drives rotated forward 90 degrees to give the tractor a tighter turning radius. "MI" sales hardly set the world on fire either, but then one must remember that at the time, Deere had no real industrial division and few dealers bothered to promote the tractors to industrial customers.

The other area where the "B" family and the "M" family collide is in a

**Studio photo of "MC," serial number 10002, taken January 4, 1949. They forgot to apply the "MC" decal.**





**This is one of the “MO” prototypes. How do we know that it’s not an “MU”? It has the “M” system hitch, not a three-point.**

**Would you like to take this thing for a spin? It’s an “MC” chassis already fitted with steering clutches.**



### "M" series totals

Year	"M"	"MC"	"MI"	"MT"
1947	3,734	0	0	0
1948	11,870	0	0	0
1949	10,055	1,093	0	4,728
1950	7,866	2,281	293	10,545
1951	7,055	1,967	392	7,540
1952	5,220	5,169	348	7,660
<b>Totals</b>	<b>45,800</b>	<b>10,510</b>	<b>1,033</b>	<b>30,473</b>

### "M" price list

"M" tractor with standard equipment consisting of four forward speeds, muffler, distributor type ignition, 40 inch tread front axle, Touch-O-Matic hydraulic control, oil filter, air cushioned, adjustable seat, electric starter, battery, power shaft, fenders, oil pressure, water temperature gauge, oil wash type air cleaner and 4 ply tires ..... \$1,370.00

"MT" equipped similarly ..... 1,494.00

#### Attachments:

Belt pulley .....	43.00
Adjustable front axle .....	19.00
Lighting attachment .....	20.00
Front wheel weight .....	9.00
Rear wheel weight (each) .....	11.00

"MC" crawler tractor with standard equipment consisting of air cushioned adjustable seat, oil filter, oil wash type air cleaner, electric starter, battery, four forward speeds, muffler, fenders, distributor type ignition, built in power shaft, heavy duty drawbar, oil pressure gauge, water temperature gauge and sod pan ..... 2,213.00

#### Attachments:

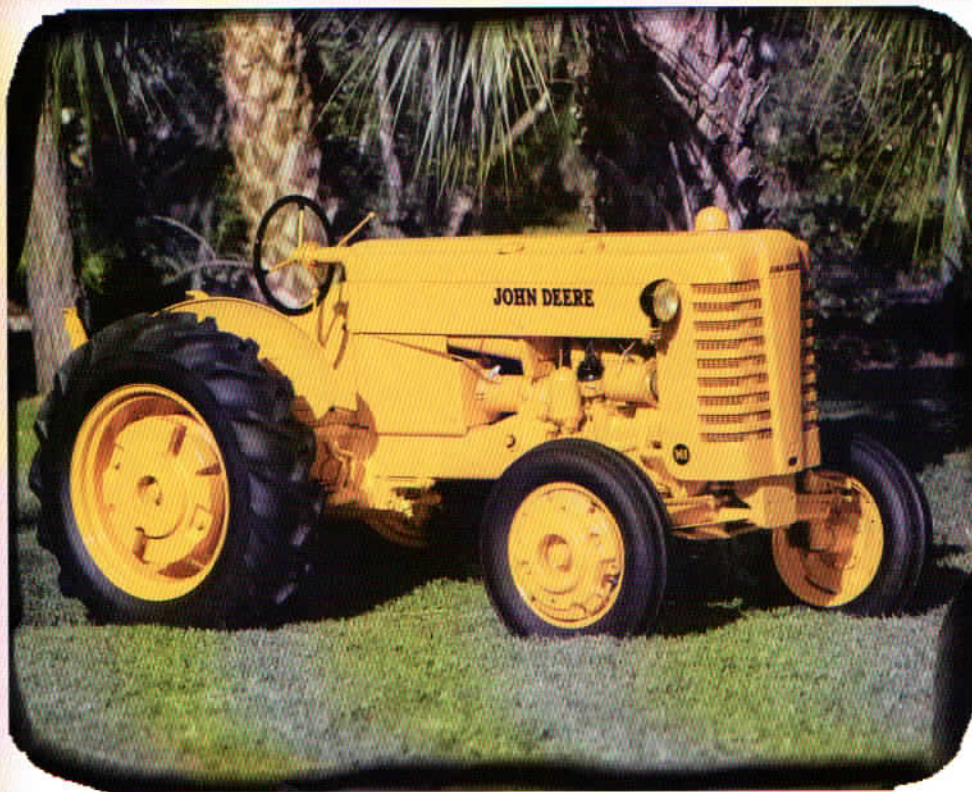
Belt pulley .....	43.00
Bumper attachment .....	9.00
Orchard muffler .....	6.00
Lighting equipment .....	13.00
Hydraulic control assembly for use with drawn implements and MC-60 dozer blade .....	186.00

### "M" series production

Model	Year	SN breaks	Beginning/ending	Total produced
"MC"	1949	10001-11092	10001 Dec. 28, 1948	10,510
	1950	11093-13373		
	1951	13374-15340		
	1952	15341-20509	20509: Sept. 3, 1952	
"MI"	1950	10001-10292	10001: Nov. 2, 1949	1,033
	1951	10293-10684		
	1952	10685-11032	11032: Aug. 14, 1952	
"MT"	1949	10001-14727	10001: Dec. 21, 1948	30,473
	1950	14728-25272		
	1951	25273-32812		
	1952	32813-40472	40472: Sept. 4, 1952	
"M"	1947	10001-13733	10001: March 12, 1947	45,800
	1948	13734-25603		
	1949	25604-35658		
	1950	35659-43524		
	1951	43525-50579		
	1952	50580-55799	55799: Sept. 5, 1952	

### "M" series wheel chart

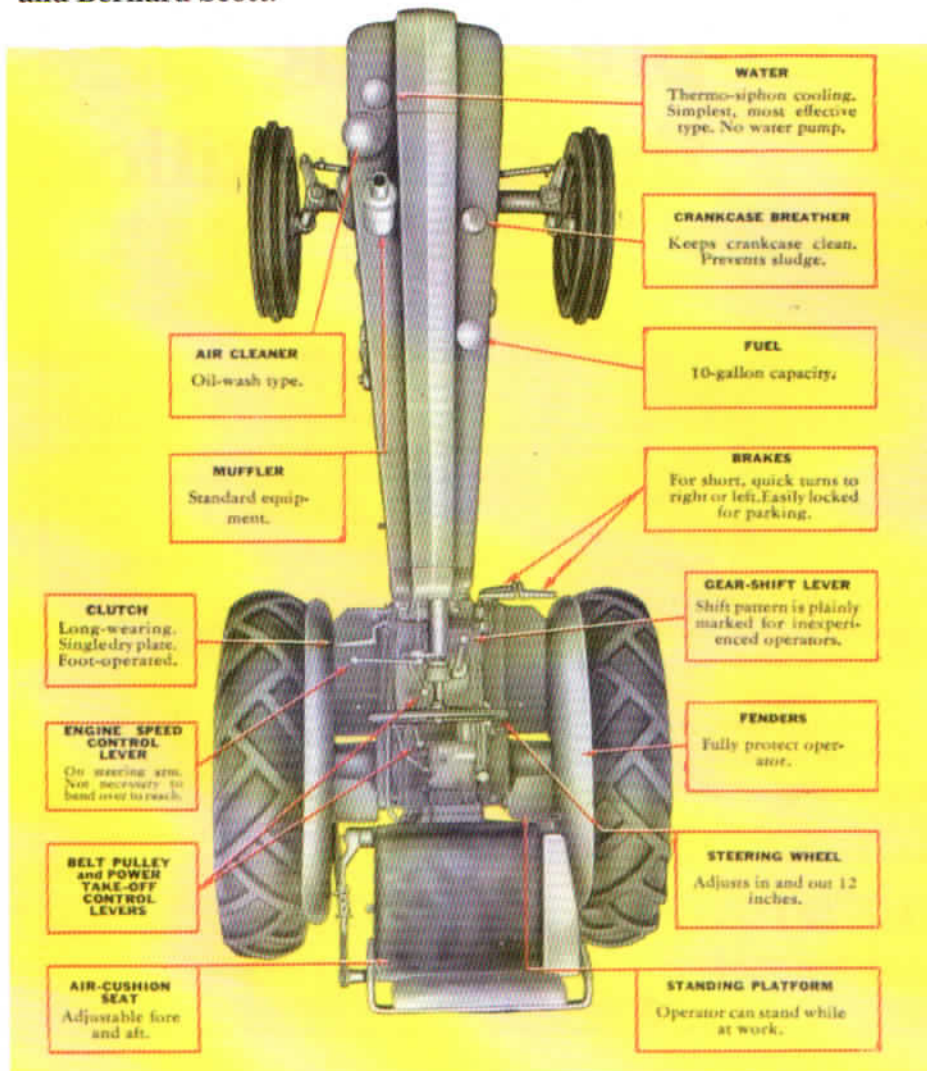
Part #	Used on	Description
<b>Front wheels</b>		
AL 2329T	"M"	Cast front wheel, used "M" 10001-43250
JD 3002T	"M," "MT," "MI"	Pressed steel wheel for 15" tires, "M" 43251-up, all "MT," "MI"
JD 3000T	"M," "MT," "MI"	Pressed steel wheel for 16" tires, "M" 43251-up, all "MT," "MI"
AM 1174T	"MT"	1/2 cast single front wheel with bearing cups
AM 1176	"MT"	1/2 cast single front wheel w/o bearing cups
<b>Rear wheels</b>		
AM 324T	"M," "MI"	Rear wheel for 8-24 tires
AM 3478T	"M," "MI"	Rear wheel for 9-24 and 10-24 tires
AM 3150T	"M"	Rear wheel for 11-26 and 12-26 tires ("M" 45344-up)
JD 3001T	"MT"	Pressed steel rear wheel for 34" tires



Bill Struth took this photo of a very nice "MI." It's owned by Bill Black and Bernard Scott.

### "M" SN/model year breaks

"M"	1947	10001-13733
	1948	13734-25603
	1949	25604-35658
	1950	35659-43524
	1951	43525-50579
	1952	50580-55799
"MC"	1949	10001-11092
	1950	11093-13373
	1951	13374-15340
"MI"	1950	10001-10292
	1951	10293-10684
	1952	10685-11032
"MT"	1949	10001-14727
	1950	14728-25272
	1951	25273-32812
	1952	32813-40472



tractor that never made it to production, the "MO." When the "BR" and its shielded brother, the "BO," were discontinued, it also left Deere without a small orchard tractor. Deere engineers built at least three prototypes of an "MO," a tractor something like the "MI" but with the final drives rotated back instead of forward. It seems though that eventually Deere decided that the small orchard tractor market was one that Deere could afford to stay out of for the time being, what with the factories running to capacity anyway. If a farmer really wanted a Deere orchard tractor, they could be steered toward buying an "AO." It seems, though, the "MO" must have come very close to being produced as some dealer sales manuals from the era have a blank page that states "Reserved For MO."

There's one more variation of the "M" that we should mention and that is the "M" utility. The "MU," as we shall refer to it, didn't originate in Waterloo or Moline, but at a dealership in central California. From information uncovered by Gil Easter, it appears that when the "M" was introduced, it wasn't competitive in that area because, unlike the "N" series Fords, it was too tall and had no three-



point. Since Deere itself apparently wasn't going to come up with a tractor that was right for the area, it took an enterprising local dealer to do so. With the assistance of an engineer from a nearby branch house, he rotated the final drives on an "M" to the back and changed the fenders, foot rests and brake pedals to fit. The front axle was lowered and a three-point hitch was added. Although the tractor seems to have had some shortcomings in the hydraulics department, it performed well enough to eventually cause a team of Deere engineers to descend on the

area, along with an "MI" for comparison. The dealer-modified "MU" outperformed the "MI" in most categories. While it is true that Deere never began to produce its own version of the "MU," it could be said that it was the inspiration for later Dubuque utility tractors such as the 320. According to best estimates, some 30 "Ms" were modified by this dealer into utilities.

The folks at Dubuque built the last "M" on September 5, 1952, soon to be replaced by the new model 40.

Today the "M" is often overlooked as a user tractor because of its

lack of three-point hitch. However, many people have used their own ingenuity to make these tough little tractors compatible with today's machinery. For the collector, the ultimate prize would be either one of the super rare all-fuel models or one of the "Ms" modified as a utility. If you just like restoring tractors, you'll find that working on an "M" can be an interesting experience and quite the change of pace from all those two cylinder horizontals. In any case, the "M" family of tractors offers something for everyone.



## And now ... presenting the competition

### Ford "8N"

The latest offering from the company that started it all then offered 25 belt horsepower. The four cylinder Ford engine turned at 2,000 RPM. The operator could choose four speeds forward and one reverse. Standard equipment included starter, hydraulic equipment and a PTO. Shipping weight was 2,390 pounds. Even Henry Ford couldn't hold prices down forever as a Ford would now cost you \$1,404.

### Farmall "C"

Like much of the Deere model "M's" competition, the Farmall "C" featured a four cylinder engine connected to a four speed gearbox. Turning at 1,650 RPM, the little four banger produced 21 horsepower. Standard equipment on the 2,671 pound unit included adjustable front and rear tread, hydraulics and PTO, starter and lights and a belt pulley—all for \$1,508.

### VAC Case

In reviewing the VAC, one can

see how the Deere "M" was unique in a world of clones. The little Case also had a four cylinder engine, though this one turned a somewhat slower 1,450 RPM, producing 21 horsepower. The 3,000 pound tractor featured standard equipment such as starter and lights, as well as the company's hydraulic "Eagle Hitch" lift. The price was \$1,520.

### Allis Chalmers "B"

Allis Chalmers tractors of this era generally had a lower purchase price than much of the major competition. The four cylinder engine in the "B" turned at 1,500 RPM and produced 22 horsepower. Allis may have saved a couple of bucks by providing a three speed transmission and offering only starter and lights as standard equipment on the \$1,130 tractor.

