



# ***Foothills Antique Tractor and Engine Club***

## **Featured Equipment**

### **Farmall M**



**Owned by  
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The Farmall M was the largest row crop tractor produced by International Harvester when it was introduced, and it was one of the most successful tractors ever produced. Over 300,000 Ms of different variations were produced from 1939 – 1954. According to Yesterday's Tractor, production was: Model M -297,717; Super M - 64,668; and Super MTA - 2,522.

The Farmall Super M tractor was made from 1952 to 1954. The nice Super M pictured above belongs to Chester Franklin, and was photographed at our 1999 Annual Show. The engine was increased from 248 cid in the M to 264 cid for the Super M. Disk brakes were a standard feature that was also added to the Super M. There were many variations to the Super M over the couple of years it was built, including the high-crop and Super MD diesel versions. The Super MTA's were produced in 1954, introducing the torque amplifier. The torque amplifier is a planetary gearset that can be shifted without using the clutch, allowing

the operator to downshift to an "underdrive" range for extra pulling power through tough spots.

I have two Ms currently being restored. Lynn bought a '44 Model M from my cousin for Christmas present in 1997. This tractor has a nice upgrade to live hydraulics with the addition of an M&W hydraulic pump mounted between the distributor and the timing gear. The belly pump is still in place, but the drive coupler has been removed and the belly pump reservoir is still used. The engine is in good shape and the sheet metal is in fair shape, but the transmission needed help. It was noisy and would jump out of high gear. A complete transmission overhaul, including replament of every bearing and repairing two shafts worn by bad bearings, was necessary to fix the transmission. All oil seals are being replaced and the brakes will be inspected and cleaned, and the clutch will probably be relined while the tractor is torn down.

I bought a '48 Model M from a friend a couple of weeks ago at a price I couldn't resist. This one is a more complete tractor that has been used until late in 1998. Unfortunately, water managed to get into the rear cylinder when the wind blew the can off the exhaust and allowed rain to enter, causing the engine to stick. This one should be an easy restoration since the tractor has all the parts except the battery box cover. Other than the stuck engine, the only known damage is the left side of the grill that is bashed in at the top, a bent PTO master shield and a rusted out rear rim. It also has a New Idea front end loader, but I doubt I'll have much use for it where I live now (it would be embarrassing for the safety specialist to flip his tractor on a steep yard).

My dad had a late model M when he and his brother ran a Grade A dairy during the '50s. They still like to brag about the smooth power delivery from their M that made it popular among neighbors for pulling hay balers and tasks that required significant power. They also brag that they got more service between overhauls than neighbors with green tractors. And, since the IH engines use sleeves, they are easy to overhaul.

If you happened to be at the 1996 Midland show, you will recall that the M's performed really well on the dynamometer. Their long-stroke engines delivered tremendous torque, and their governors performed beautifully to keep the speed steady. The one I recall the best was a Super M whose throttle and governor linkages was out of adjustment and would run at only 500 PTO RPM with no load, yet it delivered a true 42 horsepower at 450 PTO RPM. In case you are wondering, it should go about 48 hp at 540 PTO RPM. I've been told that tractor has been adjusted and should have no problem turning 540 PTO RPM next time we check it!

If you want a book with some really good pictures of Farmall tractors, I suggest *Farmall Letter Series Tractors (Originality Guides)*, by Guy Fay, Andy Kraushaar. It is a hardcover book of 128 pages published in November 1998. According to Amazon.com, this book is currently out of stock at the publisher, but Howard Jones still had a couple of copies last time I was there.

## Specifications:

### Model M:

Years manufactured..... 1939-52

#### **Nebraska Tractor Test No. 327**

Fuel..... gasoline  
Make of engine..... IH 4 cyl  
Bore x Stroke (in).....  $3\frac{7}{8} \times 5\frac{1}{4}$   
Displacement .....247.7  
Rated RPM.....1450  
Belt pulley HP .....34.3  
Drawbar HP .....25  
Maximum pull (lb).....4,365  
Speeds.....5 forward / 1 rev  
Front tires..... 6.00x16  
Rear tires ..... 11x36  
Weight (lb).....4,964  
Weight as tested (lb).....6,770  
List price.....\$3,335

#### **Nebraska Tractor Test No. 328:**

Fuel.....distillate  
Belt pulley HP .....36  
Drawbar HP .....24  
Maximum pull (lb).....4,233

The serial number is located on a silver plate on the left side of the clutch housing. The prefixes are: FBK for the M, FBKV for the high crop model, FDBK for diesel and FDBKV for high crop diesel.

#### **Model M, MD, MDV, and MV**

Year	Serial Number
1939	501
1940	7240
1941	25371
1942	50988
1943	60011
1944	67424
1945	88085
1946	105564
1947	122823
1948	151708
1949	180154
1950	213579
1951	247518
1952	290923

### Super M:

Years manufactured ..... 1952-54

#### **Nebraska Tractor Test No. 475**

Fuel..... gasoline  
Make of engine..... IH 4 cyl  
Bore x Stroke (in).....  $4 \times 5\frac{1}{4}$   
Displacement..... 264  
Belt pulley HP ..... 44  
Drawbar HP ..... 33  
Maximum pull (lb) ..... 5,676  
Speeds.....5 forward / 1 rev  
Front tires.....6.00x16  
Rear tires..... 13x38  
Weight (lb)..... 5,603  
Weight as tested (lb)..... 7,265  
List price..... \$2,540

(There was one Nebraska Tractor test completed on the Farmall Super M in 1952. Number 475 was performed using gasoline.)

#### **Model Super M, MD, MDV, MV and MTA**

Year	Serial Number
1952	501
1952	5000001
1953	12516
1953	501906
1954	51977

