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POWER

ECONOMY

EFFICIENCY

GTB

High Compression Tractor



THE GREATEST TRACTOR BUY

● The outstanding features for dependable performance and assured economy built into the GTB by Minneapolis-Moline engineers make it the **GREATEST TRACTOR BUY** in the farm field demanding an abundance of power. This big 4-5 plow MM tractor is in a class by itself when it comes to delivering steady, dependable, maximum power with economy of cost. It is the ideal tractor for handling belt work, big plowing jobs, pulling two or three drill hook-ups, large Wheatland disc plows, wide-cut harrows, and other heavy-duty farm equipment.

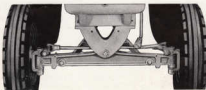
The quality construction of the Minneapolis-Moline GTB according to time-tested and field-tested methods of modern engineering make it the most modern 4-5 plow tractor of today. It features a high compression cylinder head for maximum fuel economy; force-feed lubrication to connecting rod bearings, main bearings, valve mechanism,

camshaft, and other important parts; quality-constructed 5-speed transmission with speeds ranging from 2.5 MPH to 13.8 MPH to meet varying field uses; internal expanding shoe-type brakes for quick stops; starting and lighting equipment as standard equipment, and a comfortable air-bag type seat with lazy back to lessen fatigue on long work days. A large twin-disc, hand-operated, over-center clutch assures positive control for easier operation and greater safety in hitching implements and doing belt work. The Visionlined design of the GTB means smooth, safe operation with an unobstructed view of work being done.

Owners are proud of this powerful GTB tractor built to give them outstanding fuel and maintenance economy, as well as long life. For all these features and for satisfying service, MM tractors have long been famous.

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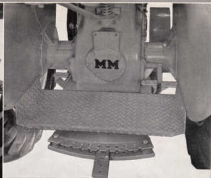
LOOK



LEFT: The heavy-duty front axle is made of malleable iron with the center pivoting on removable bushings. Ease of steering is assured by the Ross Cam and Lever type steering and by the balanced weight of the tractor.

RIGHT: The front-end weight of the GTB is balanced over the center of the inner bearing of each front wheel. This feature means longer wear on both wheels and bearings. Bearings are sealed against dirt by felt seats.





SURPLUS POWER WITH ECONOMY OF COST

ENGINE ECONOMY—The engine of the MM GTB is quality constructed for economy of operation and maintenance. The forced-feed filtered lubrication of the GTB has a capacity 4 times greater than needed when the tractor is new. In giving the pump this extra capacity when the engine is new, good lubrication is still assured when parts become worn. The lubrication system also features a by-pass which permits the oil to flow under full pressure to all lubrication points should the oil filter become clogged.

The twin cylinder blocks may be easily removed for servicing or for replacement if necessary with economy of cost.

The high-turbulence combustion chambers of the GTB are designed for maximum economy in fuel consumption. The fuel is burned progressively and evenly. This means smooth, steady power on all jobs in addition to getting full value from fuel.



The crankshaft is dynamically balanced to assure a smoother running engine with minimum vibration. The engine also features controlled cooling for greater power and longer engine and valve life.

EFFICIENT COOLING SYSTEM—In the controlled cooling system of the GTB engine jacket, water is routed through specially designed channels around combustion chambers, valve parts, valve guides, and spark plug openings. A centrifugal pump (gear driven) operates with a capacity of 36 gallons per minute. A by-pass thermostat regulates the flow of water. Water is by-passed back through the engine until the temperature reaches a pre-determined figure. The large 20-inch diameter fan is mounted on tapered roller bearings and is driven by a rugged V-belt.

STARTER AND ELECTRIC LIGHTS—Starting and lighting units are regular equipment on the GTB. Lighting equipment includes 6-volt battery, generator, three headlights, and modern instrument panel with ammeter, oil gauge, temperature gauge, light switch, and panel light.

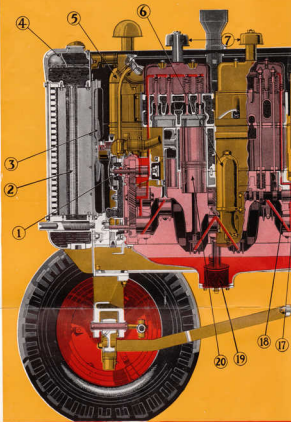
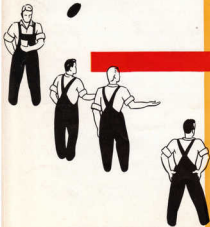
BRAKES

Internal expanding shoe-type brakes for smooth, safe, quick stops.



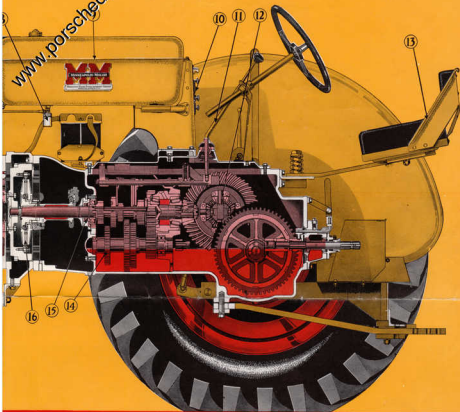
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Let's look inside



STURDY... POW

1. Centrifugal water pump mounted on bronze bushings, gear-driven-automatic water pump seal.
2. Large capacity, 12-gallon tubular radiator.
3. V-belt driven fan mounted on Timken roller bearings.
4. Radiator expansion chamber. No overflow tube is required. It is only necessary to replace water lost through evaporation.
5. By-pass thermostat for control of water temperature.
6. Oil filter with easily replaceable waste-type cartridge.
7. Moss-type breather with extra capacity assures proper crank-case ventilation.
8. Fuel filter has a filter element made up of several copper discs to remove foreign particles.



RFUL...ECONOMICAL...DEPENDABLE

Seam welded gas tank, 29-gallon capacity.

Modern instrument panel with ammeter, oil gauge, and temperature gauge.

Automotive-type gear shift—5 forward speeds and 1 reverse speed: Low 2.5, 2nd 3.5, 3rd 4.1, 4th 6.0, 5th 13.8, Reverse 2.0.

Four-pinion differential runs in a bath of oil. Revacycle type.

Cushioned seat and lazyback for added comfort. Seat has an air-bag and seat and back have hair filling.

Transmission shafts and gears are made of special alloy steel mounted on tapered roller and ball bearings. Transmission runs in a bath of oil.

15. Transmission is sealed against dust and dirt by felt seals.

16. Heavy-duty over-center twin-disc clutch, hand operated.

17. Replaceable crankshaft, main and connecting bearings are precision made of steel lined with babbitt.

18. Force-feed filter lubrication to connecting rods and main bearings, valve mechanism, camshaft, accessory shaft, timing gears, and governor.

19. Oil pump with extra capacity for positive lubrication.

20. Heavy-duty precision-made cast iron piston with 3 compression rings and 1 oil ring.

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Fuel Economy

FEATURES OF

MM
MINNEAPOLIS-MOLINE
MM
MODERN MACHINERY
TRACTORS



PATENTED HOT SPOT MANIFOLD

The exclusive MM patented hot spot manifold of the GTB gives you peak performance with various fuels, loads, and changing weather conditions. Fuel is vaporized into a more combustible mixture inside a specially shaped elbow called the hot spot, shown above. The hot spot is heated on the outside by exhaust gases, shown by black arrows, fuel leaving the carburetor passes through the inside as shown by the white arrows.

This manifold produces excellent results with gasoline when it is set in the cool position.



SPECIAL MM FEATURE

Cylinders of the GTB engine are cast two in a block separate from the crankcase for easy maintenance with economy of cost. Sturdy studs are fitted into the crankcase and extend up through the cylinder blocks and cylinder heads. The stress obtained in tightening the studs does not distort the cylinders. Stress created by the combustion pressure is transmitted by the studs to the crankcase. In this way the cylinders are not distorted by these pressures. This design makes it easy and economical to remove blocks for cylinder grinding or for replacement if and when necessary. Replacements can be made at a nominal cost.



AIR CLEANER

The GTB Tractor uses approximately 1,200 cubic feet of air for every gallon of gasoline. It is important to keep this air free from dirt and dust particles especially when operating in dusty fields.

The air passes down the intake tube to the oil wash where it goes through a bath of oil that removes fine dust and grit. The screens around the meter edge remove fine oil bubbles. Air that is cleaner than the air one breathes then passes into the engine.



PRECISION BUILT

The quality 5-speed transmission of the GTB is precision built for quiet running, and it is sturdily built to meet the unusual strains in a tractor of this size. It will give longer, trouble-free operation under tough field conditions. All parts of the transmission are completely enclosed, and they are protected from dust and dirt by a system of felt seals. Parts run in a continuous bath of oil assuring positive lubrication. Ample power to do heavy-duty belt jobs is at your fingertips. The belt pulley has a belt speed of 2540 ft. per minute at 627 RPM.

Alloy steel, heat-treated gears are used in the GTB. Gears are precision cut and are mounted on large heat-treated splined shafts. Shafts are mounted on Timken roller and ball bearings. This simple gear arrangement and the high-grade bearings reduce friction to a minimum and assure the greatest amount of direct power that this powerful tractor is built to deliver.

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Planting with MM GTB and two Maline Monitor Drill hook-ups.



MM GTB and Wheatland Disc Plow doing an extra heavy plowing job.



For the large farms and for the difficult jobs, the GTB is the choice of economy-minded farmers.



Harvesting with the GTB and MM G4 Harvester is harvesting the easy way.



MM
MANITOWOC MOTOR
MM
MODERN MACHINERY

*in
the field!*

Plowing time can be greatly reduced with the GTB.