



CLICK ANYWHERE FOR MORE DETAILS

MANUAL PREVIEW

Minneapolis Moline

Operator's Manual

Gas & LP

purchase full manual at

Operator's Manual

JENSALES.COM

or Call 800-443-0625



CLICK ANYWHERE FOR MORE DETAILS

THIS IS A MANUAL PRODUCED BY JENSALES INC. WITHOUT THE AUTHORIZATION OF MINNEAPOLIS MOLINE OR IT'S SUCCESSORS. MINNEAPOLIS MOLINE AND IT'S SUCCESSORS ARE NOT RESPONSIBLE FOR THE QUALITY OR ACCURACY OF THIS MANUAL.

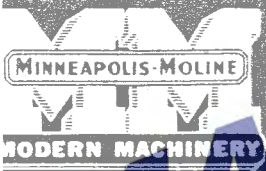
TRADE MARKS AND TRADE NAMES CONTAINED AND USED HEREIN ARE THOSE OF OTHERS, AND ARE USED HERE IN A DESCRIPTIVE SENSE TO REFER TO THE PRODUCTS OF OTHERS.

MM-O-U G&LP

OWNER'S

OPERATION & MAINTENANCE

MANUAL



MANUAL PREVIEW



JENSALES.COM

purchase full manual at

JENSALES.COM

or Call 800-443-0625

MODEL U TRACTORS

MINNEAPOLIS-MOLINE - MODEL U

Minneapolis-Moline introduced the Universal Model U in 1938. In the first year of production only about 500 tractors of this model were built.

The following year production jumped to 1,600. The Model U was one of the company's largest tractors. It was a 3 - 4 plow tractor and had many new features.

It was "visionlined", had smooth lines similar to the popular Z. It had a steel one-piece radiator shell and a bright red grille. Braking was by individually foot-operated differential brakes.

A third brake pedal operated both brakes simultaneously for positive straightline stopping. The rear wheels were covered with full crown fenders.

It was operated with a hand clutch and a 5-speed transmission varying from 2.5 MPH to about 20 MPH. The tractor was painted "Prairie Gold" with red wheels and grille.

The engine was rated at 1,275 RPM with a 4-1/4 inch by 5 inch bore and stroke. The CID was 283 cubic inches. The tests recorded a 30.9 drawbar horsepower and a 41.6 belt horsepower. Minneapolis-Moline made their own engines. This was a four cylinder I-head with valves horizontal rather than vertical, as is found in most engines. The company claimed better vaporization and easier starting. The tractors of MM usually were easy starting.

Models of the U and many numbered varieties of the UT were sold until 1952. The South Dakota Centennial Toy Tractor was a Model UTU, built to 1/16 scale replica with rubber tires, tricycle front, muffler and lights. It sold for about \$55.

In 1938 Minneapolis was to introduce the Special U Deluxe MM tractor. It was equipped with a cab called a "Comfortactor." It had two seats, ventilation, hot water heater, safety glass, a rear entrance door, starter, lights, even a cigarette lighter, and a highway gear of 40 MPH.

The tractor was advertised as a machine that could work all day, and transport the family to town when needed. One ad has a picture of a police officer giving a ticket to a UDLX Comfortactor owner: "Better take that contraption back to the farm. Us traffic officers have plenty to do chasing down automobile speeders without you bringing in 40 mile an hour tractors."

There were only about 125 of the UDLX built in 1938. It sold for about \$1,900 as compared to \$1,000-\$1,200 for a John Deere or Farmall. It was ahead of its time, as after WW II tractor cabs became popular and common.

One other version of the UDLX was a military conversion tractor to pull artillery weapons. This tractor was used by the National Guard at Camp Ripley.

It was dubbed the "jeep". This was the forerunner of the jeep as was known during and since the WW II. The name came from a Popeye Cartoon character known as Jeep.

Several of the Minneapolis UDLX and the Jeep version tractors were on display at the Roger Mohr farm near Vail, Iowa in August, 1990. More than 300 tractors and other MM equipment were displayed for four days to more than 6,000 people.

MINNEAPOLIS-MOLINE MODEL "U" TRACTORS

CLICK ANYWHERE FOR MORE DETAILS

TABLE OF CONTENTS

SPECIFICATIONS	3
LUBRICATION	5
CONTROLS	9
OPERATION	13
MAINTENANCE	19

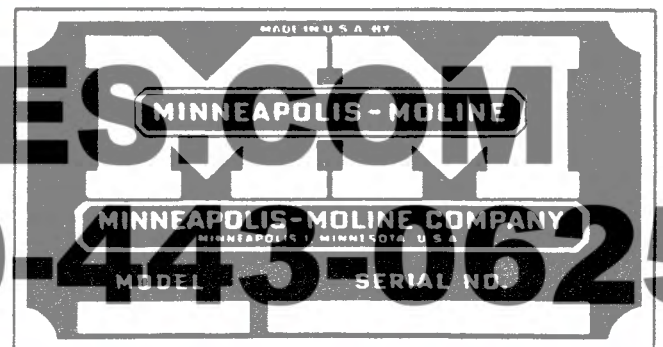
SERIAL NUMBER LOCATION

BELOW ARE SAMPLE MODEL AND SERIAL NO. PLATES FOUND ON THE TRACTOR AND THE TRACTOR ENGINE.

TO HAVE THE MODEL AND SERIAL NO. OF THE TRACTOR AND ENGINE EASILY ACCESSIBLE, WRITE

THE NUMBERS APPEARING ON THEM IN THE SPACES PROVIDED BELOW.

INCLUDE THE MODEL AND SERIAL NO. OF THE TRACTOR AND THE ENGINE WHEN ANY PARTS ARE ORDERED, OR IN ANY CORRESPONDENCE CONCERNING THE TRACTOR OR THE ENGINE.



TRACTOR NUMBER

ENGINE NUMBER

STAMPED ON THE PLATE RIVETED TO THE RIGHT SIDE OF THE TRANSMISSION CASE,

STAMPED ON THE PLATE RIVETED TO THE LEFT SIDE OF THE ENGINE CRANKCASE,

MINNEAPOLIS-MOLINE MODEL "U" TRACTORS

CLICK ANYWHERE FOR MORE DETAILS

Power take-off (Live and standard)
Shaft speed 575 RPM
Shaft spline size 1 $\frac{1}{8}$ " SAE spline

Steering gear
Types "S" and "C" Ross cam and lever
Types "U", "N" and "E" Worm and sector

Transmission speeds—Miles per hour based on 12x38 pneumatic tires.
1st. 2.7
2nd. 3.8
3rd. 4.4
4th. 6.4
5th. 14.8
Reverse 2.1

Turning radius
Types "U" and "N" 8 $\frac{1}{2}$ ft.
Types "S" and "E" 12 ft.

Weight of tractor when equipped with 12x38 pneumatic tires.
Type "E" 5500 pounds
Types "S", "U" and "N" 5300 pounds

Weight of tractor when equipped with steel wheels and lugs. 5800 pounds

Wheel base
Types "U" and "N" 88 inches
Type "S" 80 inches
Type "E" 96 inches

Width overall
Types "U" and "E" 83 inches
Type "S" 71 inches
Type "N" 96 inches

JENSALES.COM

or Call 800-443-0625

CLICK ANYWHERE FOR MORE DETAILS

BAYONET OIL GAGE

THE BAYONET OIL GAGE IS ON THE LEFT SIDE OF THE CRANKCASE. CHECK THE OIL LEVEL BEFORE STARTING THE ENGINE. IT SHOULD BE TO THE FULL MARK. ALWAYS KEEP THE OIL LEVEL BETWEEN THE "L" AND "H" MARKS ON THE BAYONET GAGE, AND CHECK OIL TWICE DAILY.

BREATHERS

THERE ARE TWO BREATHERS ON THE TOP OF THE ENGINE AND THEY PROTRUDE THROUGH THE HOOD. REMOVE AND CHECK TO SEE THAT THEY HAVE NO OBSTRUCTIONS AND ARE OILED.

AIR CLEANER

REMOVE AIR CLEANER CUP AND SEE THAT IT IS FILLED TO THE LEVEL MARK WITH ENGINE OIL (FIG. 11). CHECK THE INLET CAP TO SEE THAT IT IS NOT CLOGGED.



FIG. 11 Air Cleaner Cup

HYDRAULIC RESERVOIR

REMOVE THE FILLER PLUG ON THE RESERVOIR AND SEE THAT THE OIL LEVEL IS UP TO THE FILLER PLUG HOLE. USE ONLY GENUINE MM HYDRAULIC OIL IN THIS SYSTEM AND FILL ONLY WHEN THE JACK IS CONTRACTED.

TRANSMISSION

REMOVE THE LEVEL PLUG ON THE RIGHT SIDE OF THE TRANSMISSION CASE AND SEE THAT THE OIL LEVEL IS UP TO THE HOLE. SEE "LUBRICATION" FOR CORRECT PROCEDURE IN SERVICING THE TRANSMISSION.



FIG. 12 HYDRAULIC RESERVOIR

STEERING COMPARTMENT

REMOVE THE FILLER PLUG AND MAKE CERTAIN THE COMPARTMENT IS FILLED WITH OIL.

FUEL SYSTEM

FILL THE FUEL SUPPLY TANK AND THE STARTING PROCEDURE OF THE VARIOUS TYPES WILL BE EXPLAINED THOROUGHLY IN THE FOLLOWING PARAGRAPHS.

STARTING GASOLINE ENGINE

OPEN THE SHUT-OFF VALVE ON THE FUEL FILTER BOWL AND ALLOW THE CARBURETOR BOWL TO FILL WITH GASOLINE.



FIG. 13 SHUT-OFF AND CARBURETOR

SCREW THE HIGH AND LOW SPEED NEEDLES ON THE CARBURETOR ALL THE WAY IN AND OPEN EACH TWO TURNS (FIG. 13).

FUEL FILTER

AT REGULAR INTERVALS, THE GLASS FILTER BOWL SHOULD BE REMOVED AND CLEANED OF ANY ACCUMULATION OF WATER AND DIRT. REMOVE AND CLEAN THE ELEMENT AND MAKE CERTAIN THE GASKET IS IN GOOD CONDITION BEFORE REPLACING (FIG. 25).

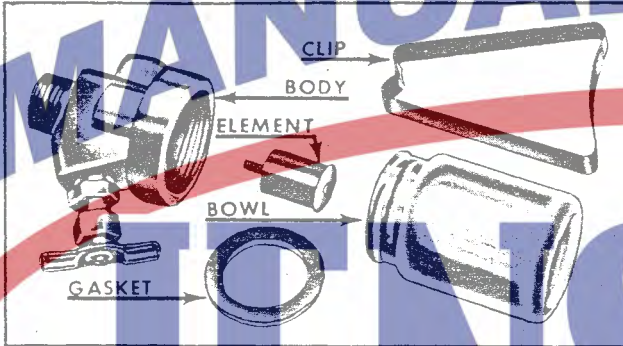


FIG. 25 FUEL FILTER

ON TRACTORS EQUIPPED WITH LP-GAS, SHUT THE FUEL SUPPLY OFF AT THE TANK BEFORE DISASSEMBLING. PROCEED AS FOR A GASOLINE FILTER EXCEPT THAT THE ELEMENT IN THE LP-GAS FILTER MUST BE PERFECTLY DRY OF CLEANING FLUID BEFORE REPLACING (FIG. 26).



FIG. 26 LP-GAS FILTER

CARBURETOR

OPEN THE BOWL DRAIN COCK FREQUENTLY TO ELIMINATE ANY DIRT OR WATER THAT MAY ACCUMULATE.

ENGINES WITH LOW COMPRESSION HEADS AND AUXILIARY STARTING TANKS ARE EQUIPPED WITH A STRAINER IN THE CARBURETOR BOWL. OCCASIONALLY DISCONNECT THE FUEL LINE AT THE CARBURETOR AND REMOVE AND CLEAN THE SCREEN.

A VACUUM IS MAINTAINED IN THE FLOAT BOWL WHEN THE ENGINE IS RUNNING. TO PREVENT DUST FROM ENTERING THE FLOAT BOWL, IT IS NECESSARY THAT THE BOWL GASKET BE KEPT IN GOOD CONDITION AND TIGHT.

THE FLOAT LEVEL CONTROLS THE FUEL LEVEL IN THE CARBURETOR BOWL. FOR THIS REASON IT IS IMPORTANT THAT THE FLOAT LEVEL BE ACCURATE. IT SHOULD BE 5/16 INCH AS SHOWN IN FIG. 27.

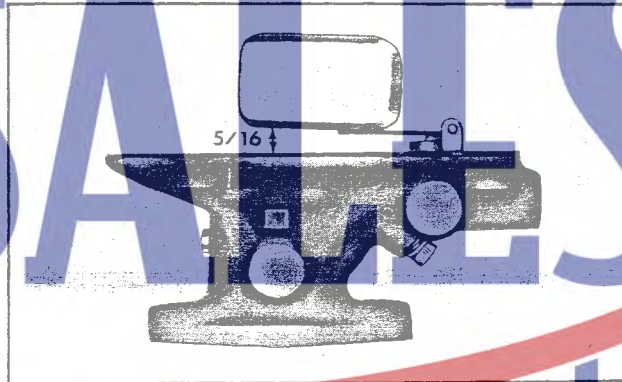


FIG. 27 FLOAT LEVEL

IF THE NEEDLE VALVE AND SEAT BECOME WORN OR NOTCHED, REPLACE WITH NEW ONES (FIG. 28).



FIG. 28 NEEDLE & SEAT

MINNEAPOLIS-MOLINE MODEL "U" TRACTORS

CLICK ANYWHERE **INDEX** FOR MORE DETAILS

Controls 9-12

Ammeter	10
Belt pulley clutch	12
Brake pedals	12
Brake pedals, cane tractor	12
Choke button	10
Clutch lever	11
Fuse cap	10
Gear shift lever	11
Hydraulic control lever	11
Ignition and light switch	9
LP-Gas tractor instruments	10
Oil pressure gage	10
Power take off	12
Starter button	10
Temperature gage	10
Throttle lever	11

Lubrication 5-8

Air cleaner and breathers	5
Cane tractor rear axle housing	8
Clutch collar	8
Distributor	8
Engine oil	5
Fan hub	8
Front wheels	8
Generator	8
Starting motor	8
Steering gear	5
Transmission oil	5
Water pump	8

Maintenance 19-35

Air cleaner and breathers	20
Adjustable seat	35
Battery, starter and generator	22
Brakes	27

CLICK ANYWHERE FOR MORE DETAILS

MINNEAPOLIS-MOLINE MODEL "U" TRACTORS

CLICK ANYWHERE FOR MORE DETAILS

Carburetor	21
Clutch	27
Cooling system	31
Distributor	24
Drawbar	33
Fan and generator belts	22
Figuring pulley sizes	34
Front wheels	29
Fuel filter	21
Governor	22
Hydraulic system	32
Mounting tires	34
Oil filter and pressure regulator	19
Oil pump sump	19
Power take off	31
Spark plugs	26
Timing the engine	24
Tire care	33
Valve clearance adjustment	23
Wheel weights	29
Wheel widths	30
Winter storage	35

Operation	13-18
-----------	-------

Air cleaner	14
Bayonet oil gage	14
Breathers	14
Cooling system	13
Cylinders	13
Exhaust manifold heat control	15
Fluid capacities for rear tires	13
Fuel system	14
Hydraulic reservoir	14
Pneumatic tires	13
Starting gasoline engine	14
Starting LP-Gas engine	16
Starting tractor fuel engine	15
Steering compartment	14
Stopping gasoline engine	15
Stopping LP-Gas engine	18
Stopping tractor fuel engine	16
Transmission	14

CLICK ANYWHERE FOR MORE DETAILS