John Deere Model "A" Series Tractor (Serial No. 584000 and Up)

JOHN DEERE

OPERATORS MANUAL

John Deere Model "A" Series Tractor
(Serial No. 584000 and Up)

OMRA2248 (01FEB48) English

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LITHO IN U.S.A.
ENGLISH

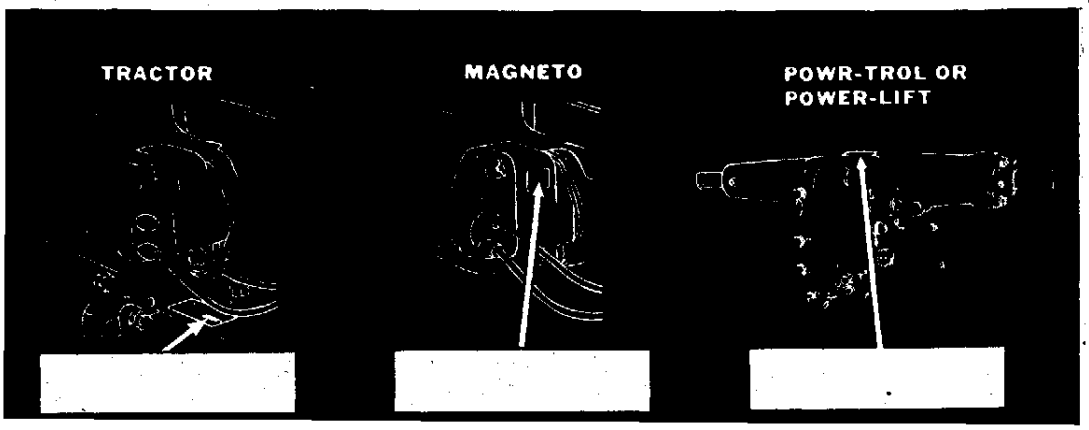
WE welcome you to our ever-growing family of John Deere tractor owners. We are confident that the dependable and economical performance of your new tractor will prove that you made a wise choice.

Back of your tractor is an organization that has been building farm equipment for more than one hundred years. The plant in which your tractor was built is the largest single tractor plant in the world. In this modern factory, equipped with the finest precision machinery, fine materials, high-grade workmanship, thorough inspection, and complete testing are combined to give you the best in dependable tractor performance and economical tractor operation.

The way you operate your tractor and the care you give it have much to do with the service and satisfaction you will get from it. This manual has been carefully prepared and profusely illustrated to show you what to do and when to do it. It has been written by the best engineers in the John Deere tractor factory. Make it your guide. Study it carefully. Refer to it often. Only by following the suggestions it contains can you hope to get the most from your investment.

If you find that you need information not covered in this manual, or if your tractor requires special servicing, which it will periodically, take advantage of the facilities offered by your John Deere dealer. He has trained mechanics, who are kept informed on the best methods of John Deere tractor servicing and can give you prompt, "know-how" service in the field or in his shop.

When in need of parts, go to your John Deere dealer. Be sure to give him the serial number of your tractor. The illustrations, below, will show you where to find the serial numbers of your tractor, magneto, and Powr-Trol or power lift. Obtain these serial numbers from your tractor—NOW—and insert them in the spaces provided in the illustrations below. Also, be sure they are written on the special identification card which is included with the manual. Put it in your billfold for ready reference.



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Even though your dealer has carefully inspected this tractor before delivering it to you, it is always good business to recheck the items which are encircled on the reproduction below of the envelope which contains this manual.

TO THE NEW JOHN DEERE TRACTOR OWNER

Each John Deere tractor is carefully designed, assembled, and given a complete test and final inspection at the factory before it is shipped. Our main ambition is to deliver tractors to new owners in the same mechanical condition as when shipped from the factory.

To enable us to fulfill this one ambition, this tractor was carefully inspected for irregularities that may have occurred in shipment. This inspection included a complete checking of the following:

- ☑ Wheel equipment; (Tire pressure;) Wheel weights; Install calcium chloride if requested by new owner.
- ☑ Radiator (Fill with water) or anti-freeze; Inspect shutter control.
- ☑ Air cleaner (oil level.)
- ☑ Crankcase (oil level.)
- ☑ Transmission oil level.
- ☑ Steering housing oil level
- ☑ Power lift or Powr-Trol oil level
- ☑ Grease tractor.
- ☑ Rear wheel brakes.
- ☑ Clutch operation.
- ☑ Spark plug gaps.
- ☑ Carburetor setting (may require adjusting later according to fuel burned). (See Instructions in Manual.)
- ☑ Engine speed and oil pressure
- ☑ Inspect rubber hose connections
- ☑ Connect Battery Ground Terminal
  Check battery water level
  Grease terminal posts.
- ☑ Check lights
- ☑ Check starting motor for operation.
- ☑ Serial numbers entered in owner's register.

The above inspection made by John Doe
Date 1/17/47 Dealer Good Business Impl. Co.

HANG THIS BOOK IN A HANDY PLACE

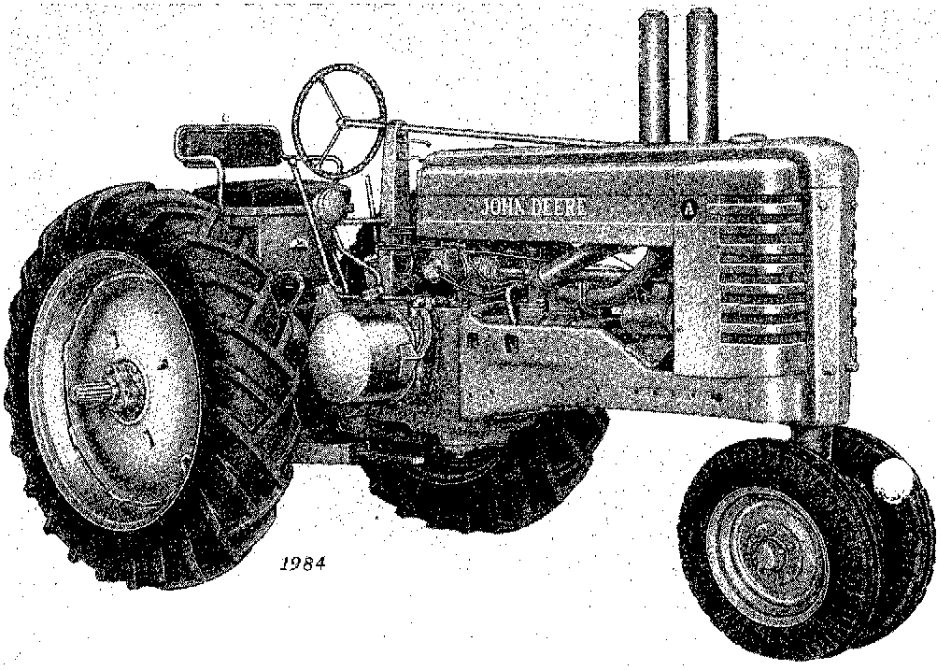
(1723)

We suggest this rechecking especially during freezing weather or when a period of time has elapsed between delivery and when you are ready to operate it. For complete starting information, see page 14.

We, your John Deere dealer, are mighty proud to add your name to our list of John Deere tractor owners. Because we are interested in having you obtain from this new tractor all the comfort and long life that are built into it, we are pleased to discuss the following important maintenance operations:

- ☐ Controls.
- ☐ Breaking-in Period—Part Load, Open Throttle, Changing Oil.
- ☐ Method of Starting and Stopping Engine.
- ☐ Lubrication—Engine, Transmission, Power Lift, Powr-Trol, Grease Fittings, Air Cleaner and Oil Gauge.
- ☐ Cooling System—Adding Water, Shutter Control, Cleaning.
- ☐ Fuel System—Fuel, Fuel Control, Sediment Bowl and Trap, Carburetor Adjustment.
- ☐ Tires—Inflation, Inspection, Wheel Weights.
- ☐ Drawbar—Adjustment; pull from no other place.
- ☐ Magneto Care—Terminals Tight, Cleaning, Oiling, Adjusting Points.
- ☐ Rear Wheel Brakes—Adjustment.
- ☐ Clutch—Adjustment, Pulley Brake.
- ☐ Front Wheels—Cleaning, Adjustment and Spacing.
- ☐ Power Lift or Powr-Trol—Drop Control, Operation.
- ☐ Starter and Lights—Starting, Lights, Battery Care.
- ☐ Tightening Bolts and Nuts—Caution on Governor Cover Cap Screws.
- ☐ Safety in Operation—Selecting Proper Speed, Power Shaft.
- ☐ Keeping the Tractor Clean.
- ☐ Have Farmer Operate the Tractor.
- ☐ Appointment for After-Sales Service—not later than two weeks after delivery.

John Deere
Model "A" Tractor—
Pulley Side



SPECIFICATIONS

CAPACITY....2-16" plow bottoms or a 2-bottom bedder under normal conditions or 3-14" plow bottoms or a 4-bottom bedder under favorable soil conditions.

Maximum Belt Horsepower:
- Gasoline..... 38.02
- All-Fuel..... 29.59

Maximum Drawbar Horsepower:
- Gasoline..... 34.14
- All-Fuel..... 26.20

Maximum Pull:
(2nd Gear)
- Gasoline..... 4045 lbs.
- All-Fuel..... 3053 lbs.

ENGINE:

Engine.....Two-cylinder, cast-in-block, valves in head.

Engine Speed.....975 R.P.M. (Load)

Bore and Stroke.....5-1/2" x 6-3/4"

Displacement.....321 cubic inches

Compression Ratio:
- Gasoline..... 5:60 to 1
- All-Fuel..... 4:50 to 1

Carburetor.....Natural-draft type.

Magneto....High-tension with automatic impulse.

Spark Plugs:
- Gasoline....18 mm., Edison Z-142 or Champion No. 6 Comm.
- All-Fuel....18 mm., Edison Z-19 or Champion No. 8 Comm. C.

Lubrication....Full force-feed pressure system with Purolator oil filter element. Total oil capacity—11 U. S. quarts.

Cooling System.....Thermo-siphon with water capacity of 8-3/4 U. S. gallons.

Air Cleaner.....Oil-wash type.

Fuel System.....Gravity-feed.

Gasoline Tank Capacity:
- Gasoline..... 14 U. S. gallons.
- All-Fuel..... 1 U. S. gallon.

Fuel Tank Capacity:
(All-Fuel only)..... 14 U. S. gallon

Clutch.....Hand-operated, two 10" dry disks.

Belt Pulley:
- Diameter..... 12-13/16"
- Width..... 7-3/8"
- R.P.M. (Load)..... 975
- Belt Speed..... 3270 F.P.M.

TRANSMISSION:

Transmission..... Six speeds forward and one in reverse.

Gears..... Selective-type, straight spur-cut gears, forged and heat-treated.

Bearings..... Shafts operate on 2 Hyatt roller bearings, 4 Timken-tapered, and 6 New Departure bearings.

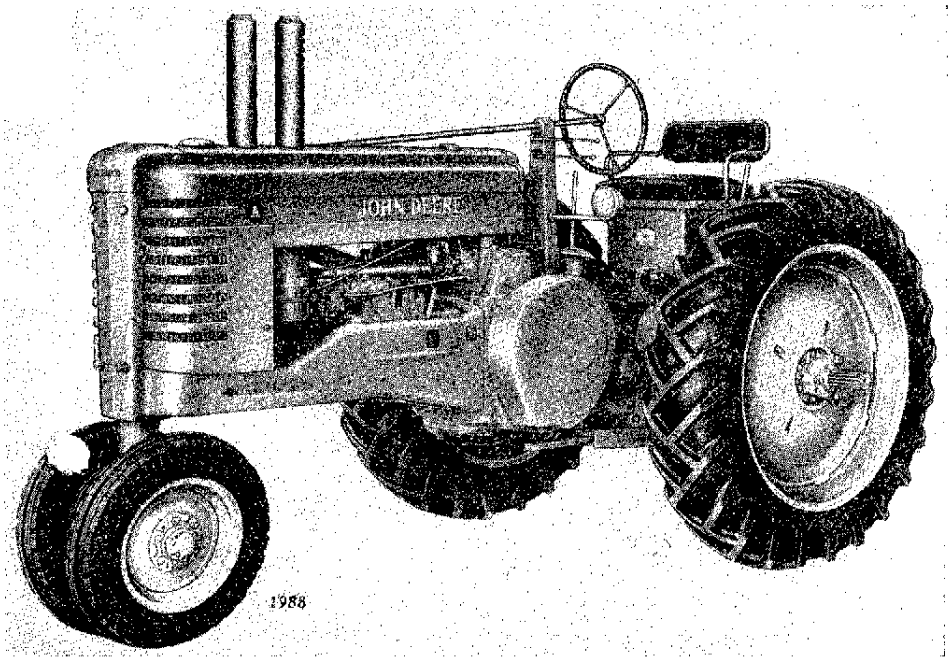
Oil Capacity..... 7 U. S. gallons.

REAR AXLES.. 2-3/4" diameter. Mounted on 4 Timken-tapered roller bearings.

REAR WHEELS:

"A"..... 11-38, 6-ply tires, mounted on cast disk wheels (recommended for average field conditions.) **NOTE:** Cast disk wheels approximately 250 pounds heavier than steel wheels.

John Deere
Model "A" Tractor—
Flywheel Side



AND DATA . . . .

"AN" and "AW"...11-42, 6-ply tires, mounted on cast disk wheels. NOTE: Cast disk wheels approximately 250 pounds heavier than steel wheels.

REAR WHEEL BRAKES.....Two automotive-type internal-expanding rear wheel brakes.

FRONT WHEELS:

"A".....Reversible for added clearance. 5.50 x 16", 4-ply rubber tires. Mounted on 4 Timken-tapered roller bearings.

"AN".....Uses 7.50 x 16", 6-ply tire. Wheel mounted on 2 Timken-tapered roller bearings.

"AW"....Uses 5.50 x 16", 4-ply tires. Wheels mounted on 4 Timken-tapered roller bearings.

SPEEDS:

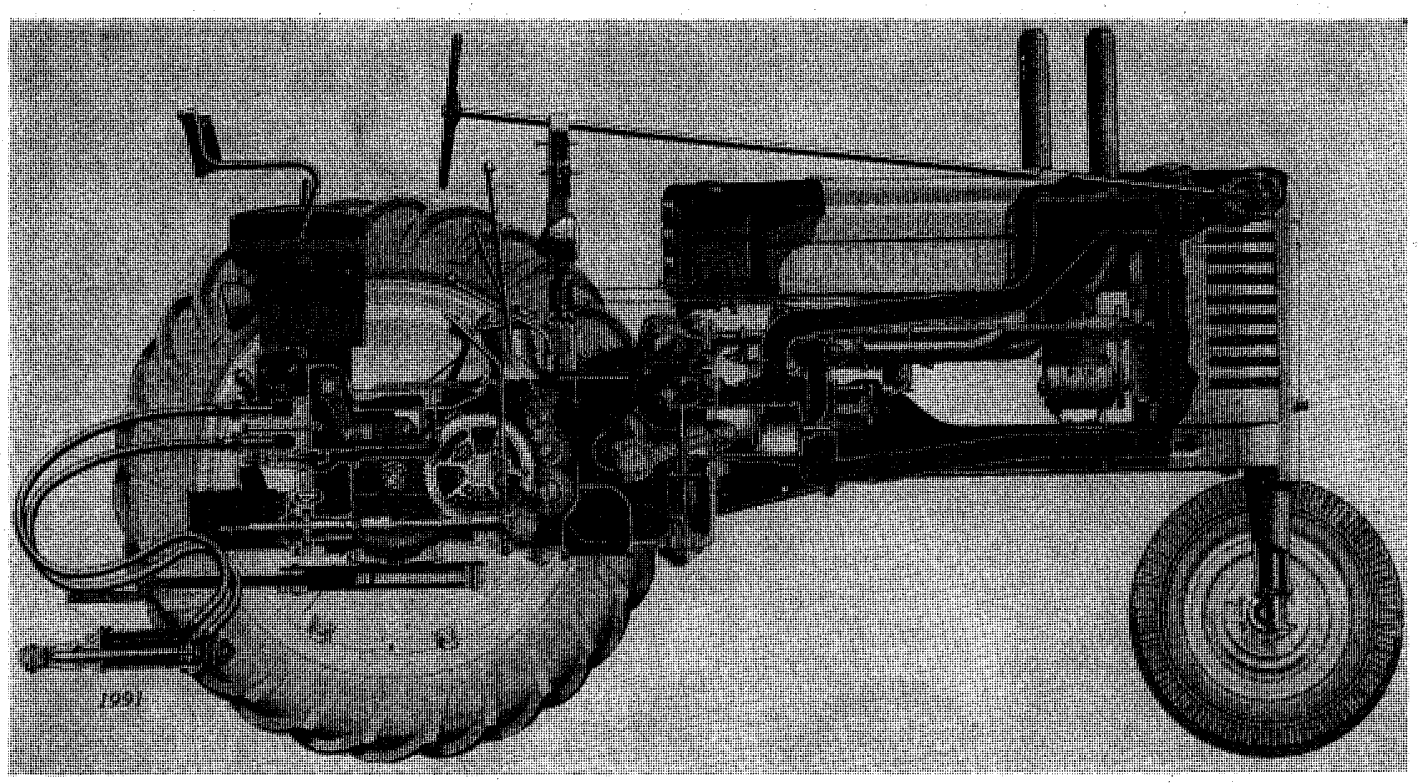
Gear	"A"	"AN" and "AW"
1	2-1/2 M.P.H.	2-3/4 M.P.H.
2	3-1/2 M.P.H.	3-1/2 M.P.H.
3	4-1/2 M.P.H.	4-3/4 M.P.H.
4	5-3/4 M.P.H.	6 M.P.H.
5	7-3/4 M.P.H.	8 M.P.H.
6	13 M.P.H.	13-3/4 M.P.H.
Reverse	4 M.P.H.	4-1/4 M.P.H.

(Above speeds are for tractors equipped with wheels and tires as shown under "Rear Wheels".)

	"A"	"AN"	"AW"
DIMENSIONS:			
Wheel Base	90"	90-1/4"	96-3/8"
Over-All Height	81-1/8"	84-3/4"	82-7/8"
Height to Radiator Cap	63-7/8"	67-1/2"	65-5/8"
Over-All Length	134"	137-3/8"	142-1/4"
Width Over Axles	86-3/8"	102-1/2"	102-1/2"
Tread Adjustment	56–88	56–104	56–104
Clearance	26"	27"	27"
Turning Radius	8' 7-1/2"	10' 6"	15' 6"
POWER TAKE-OFF:			
Shaft Diameter	1-3/8"	1-3/8"	1-3/8"
Shaft R.P.M.	546	546	546
Splined End is Above Ground	21-7/8"	23-3/8"	24-1/4"
Splined End Ahead of Hitch	14"	14"	14"
SHIPPING WEIGHT	4750 Lbs.	4850 Lbs.	5150 Lbs.

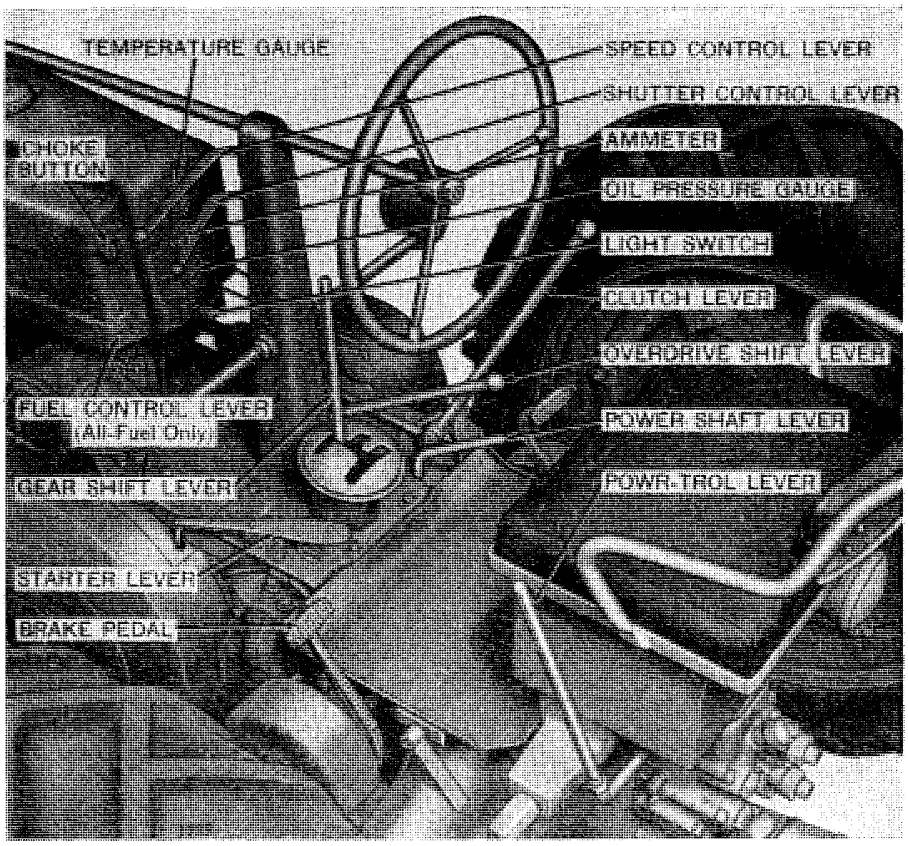
(Weights are for Tractors dry and with wheel equipment as shown under "Front Wheels" and "Rear Wheels".)

(Detailed design subject to change without notice)



Cross-Sectional View of John Deere Model "A" Tractor

CONTROLS



Controls of John Deere Model "A" Tractor

The quality of work and the amount of work you do with your tractor not only depend upon the use of proper equipment, but also upon the ease and convenience of tractor operation. If you are in an uncomfortable position, if you have to fight the steering wheel, or if you can't see what you are doing, you are definitely handicapped.

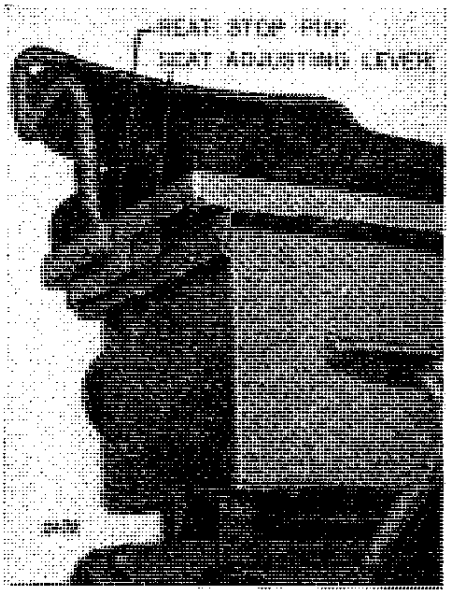
Your John Deere tractor is as convenient to handle as your automobile. All controls are readily accessible. Clutch lever, throttle, fuel control, radiator shutter control, and Powr-Trol lever are reached easily from the operator's seat. Under your feet are the convenient brakes, hydraulic power lift foot control pedal, and a large, comfortable platform on which you can stand if you so desire.

Familiarize yourself with all the controls provided for safe and easy operation of your new tractor. Regardless of your previous tractor experience, study this section covering controls carefully before you operate your tractor.

SEAT AND BATTERY COMPARTMENT

The deep-cushion seat increases operator comfort and reduces fatigue at the wheel. It can be quickly and easily adjusted to suit the operator by simply pulling out on the seat latch and pushing seat to any desired position. Arm and back rests safeguard the operator when traveling over rough ground.

The high seat location affords the operator an unexcelled view of his work.



Seat

The seat support provides a sturdy, cool, clean, safe and well-shielded compartment for the batteries. Convenience of batteries insures periodic checking and inspecting which results in longer battery life. By lifting up the seat cushion or sliding the seat forward, the batteries are readily accessible for servicing.

STEERING

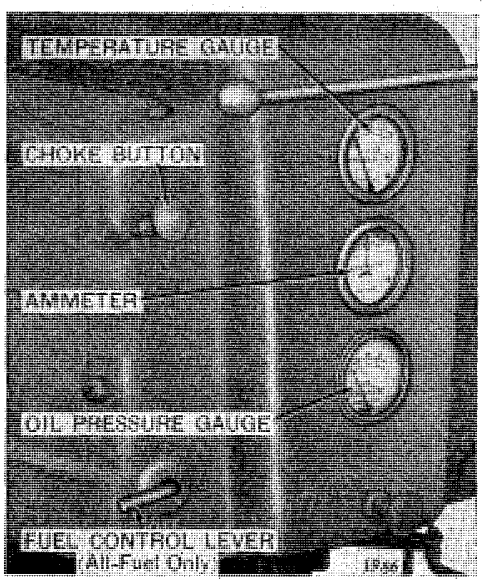
Steering Wheel

Due to the high, centered seat location, tapered fuel tank, and narrow, streamlined design, you can easily see what you are doing at either side. This design, coupled with a steering mechanism built to eliminate entirely objectionable wobble, backlash, or whipping of the steering wheel, even in the roughest going, permits you to work in freedom and comfort.

Smooth, responsive steering can be maintained throughout the life of your tractor by means of the adjustments provided for this purpose.

Adjustments can be quickly and easily made by your John Deere dealer's serviceman.

SHUTTER AND FUEL CONTROL, AMMETER, HEAT AND OIL GAUGES



Ammeter, Oil and Temperature Gauges

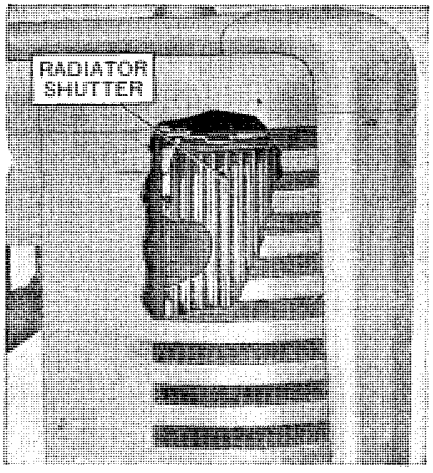
The temperature of the tractor is effectively controlled from the driver's seat by means of a manually-operated radiator shutter.

The engine temperature gauge is located in plain sight of the operator and indicates when to adjust the shutter.

For best operation, All-Fuel engines should always be operated up to their proper temperature, which is 190°F. registered on heat indicator. This results in greater all-around economy, better lubrication and more power.

A convenient, three-way fuel control lever on All-Fuel tractor is located on the instrument panel, enabling the operator to switch from gasoline to low-cost fuel or to shut off the fuel supply entirely without leaving his position at the wheel.

While engine temperature is not so important when burning gasoline, it is good practice to maintain an operating temperature of at least 180°F.



Radiator Shutter

Also located on the instrument panel is the oil pressure gauge. This gauge does not in any way tell the amount or condition of the oil in the crankcase. It only indicates whether the oil pump is working. The indicator hand of the gauge should rest between the letters "M" and "H" when the engine is running fast idle. If pressure is not registered on the oil gauge when the engine is started, stop the engine immediately.

CHOKE

When starting the engine cold, set choke in full-choke position. Over-choking or excessive use of the choke will flood the engine, causing hard starting.

STARTING

To start the tractor, pull choke, and step on starter lever.

The starting motor is geared into the flywheel which is protected by a guard.

For additional information on starting, see section "Starting the New Tractor", page 14.

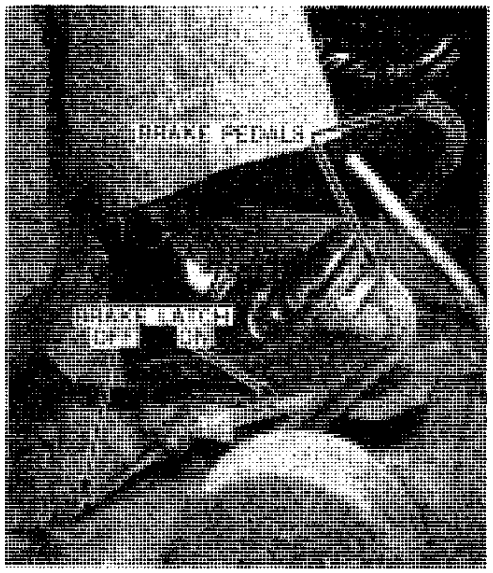
Starting

BRAKES

Individually foot-operated differential brakes make possible short turns to right or left at the row-ends.

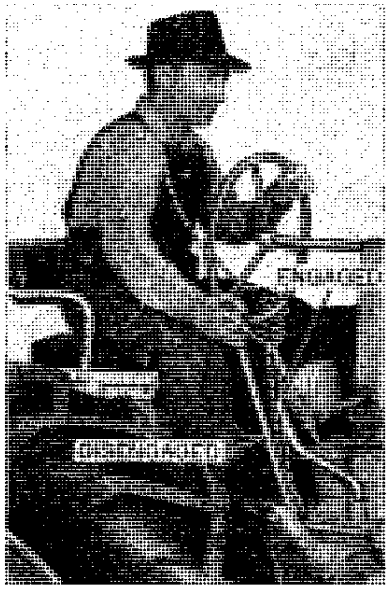
If the brakes are pressed simultaneously with both feet, they assure you safer stopping at high transport speeds.

A brake latch is conveniently located for locking each brake when doing belt work or when stopping the tractor on a hill or incline.



Brake Operation

CLUTCH LEVER



Clutch Lever

The power required to put the tractor in motion is gradually and smoothly applied to the drive system by slowly pushing the clutch lever forward. As the tractor picks up speed, give the lever a quick forward thrust until the clutch snaps into engagement.

By pulling back on the clutch lever, the clutch is released and the engine disconnected from the transmission. The pulley brake, which is a part of the clutch lever, stops the pulley from rotating, permitting easy shifting of the transmission gears.

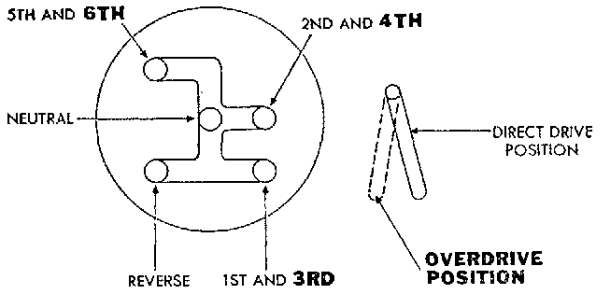
When the engine is running and the tractor is not moving, the life of the clutch parts and pulley bearings can be prolonged by shifting the gear shift lever into neutral and engaging the clutch. This allows the pulley and crankshaft to turn as one unit, reducing frictional wear, and lengthening the life of clutch parts.

GEAR SHIFT LEVER

Familiarize yourself with the shifting diagrams before you attempt to operate the tractor.

If gears do not shift freely, move clutch lever forward until pulley turns slowly. This allows gear teeth to line up for shifting.

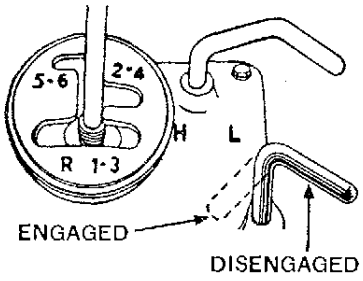
Avoid clashing of gears. This causes unnecessary wear and possible breakage.



Gear Shift and Overdrive Lever Positions

POWER SHAFT

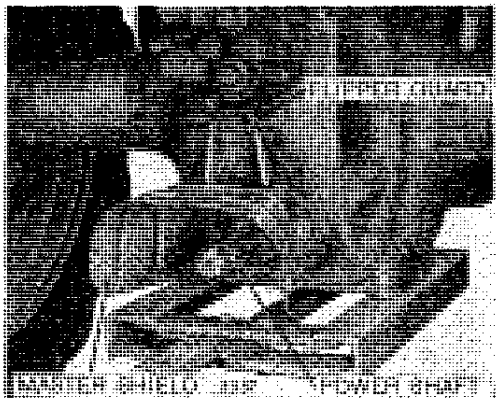
The power shaft is started and stopped with the clutch lever and can be operated whether the tractor is moving or not. To put the power shaft into operation, first move the power shaft shift lever to the engaged position, with gears in mesh. With the engine running, engage the clutch and the power shaft will operate.



Power Shaft Shift Lever in Disengaged Position

Whenever the use of the power shaft is not required, disengage the power shaft shift lever.

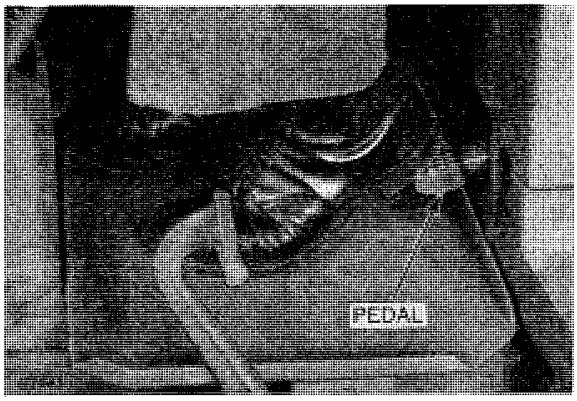
The power shaft master safety shield is provided for the safety of the operator. This master shield should be removed only when necessary to mount some integral equipment where the power shaft is used. Replace the master shield immediately upon removal of the equipment.



Power Shaft Flipper Guard

The power shaft flipper guard should **never** be removed from the tractor. Do not operate the tractor with the end of the power shaft exposed. If the flipper guard is damaged, repair or replace it immediately.

Note: *Make it a standing rule never to dismount from the tractor without first disengaging the power shaft lever.*



Power Lift Pedal

POWER LIFT

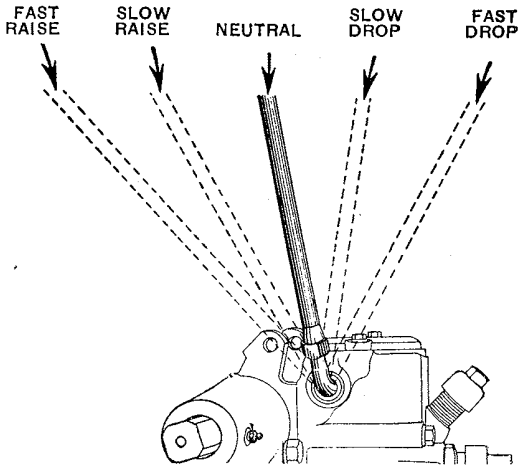
The hydraulic power lift is simple and positive in action and provides a cushioned drop for all equipment. To put the power lift into operation, first move the power shaft shift lever to the engaged position. With the engine running and the clutch engaged, the power lift is now ready to function. To operate the power lift, step down on the pedal with the heel of either foot.

Equipment can be raised or lowered while the tractor is in motion or standing still.

POWR-TROL

The Powr-Trol system can be used for rockshaft operation or with remote cylinder. Operation of Powr-Trol lever is the same for both.

To operate the Powr-Trol move lever to one of five positions: 1—neutral, 2—slow raise, 3—fast raise, 4—slow drop, and 5—fast drop.



Powr-Trol Lever

1. The neutral position of the lever is slightly forward of vertical.

2. To decrease depth of the implement or to raise it slowly move the lever forward approximately one-half of its travel. The lever must be held in this position until the desired adjustment is reached.

3. To raise implement fast, move lever forward to its farthest position (not necessary to hold). The lever will return to neutral position automatically on completion of lifting stroke.

4. To increase depth of the implement or to drop it slowly, move the lever to the rear approximately one-half of its travel. The lever must be held in this position until the desired adjustment is reached.

5. To drop implement fast, move the lever to the rear as far as possible. The lever will remain in this position until used again in rockshaft operation. With remote cylinder the control lever returns automatically to neutral upon completion of the lowering cycle.

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first, and then click the above link

to download the complete manual.

Thank you so much for reading

FUELS

Now that you are familiar with the controls your next consideration before starting your tractor is the type of fuel you are going to use.

The gasoline engine is designed to operate economically on regular-grade gasoline. Third-grade gasoline or power fuels are not satisfactory for use in this engine.

The All-Fuel engine is designed to operate on gasoline, power fuel, tractor fuel or kerosene, and no difficulty will be experienced with these fuels if the simple operating directions are followed.

These low-octane, lower-cost fuels are manufactured to a variety of specifications; therefore, the All-Fuel tractor owner should investigate available fuels to determine which will give the most satisfactory results under the prevailing operating conditions, making sure that the directions are followed for adjusting carburetor and maintaining temperature.

In all communities where these low-octane fuels are available, they are generally used in All-Fuel tractors because these tractors will burn them successfully without any detrimental effect to the working parts of the tractor and at a saving in fuel costs.

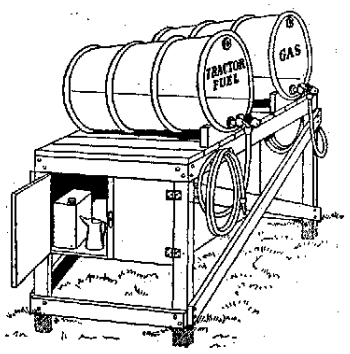
FUEL STORAGE

Fuel should be stored in a convenient place outside of buildings. If fuel drums are used, they should be located in a shady spot to prevent undue evaporation.

A rack for holding fuel and oil drums is simple to make and saves time and labor in refueling and lubricating the tractor, truck, or family car.

These racks are built of two by fours, a few boards, and a handful of nails. Bolts are recommended instead of nails for the main framework.

Illustration at right shows a single-deck rack with a dust-proof cabinet in one end to store grease, oil funnel, measuring can, etc.



Single-Deck Fuel Storage Rack