

300B - 400B Tractors

Operators Manual

9-472

Reprinted





This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about your safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death.

SB001

IF THIS MACHINE IS USED BY AN EMPLOYEE, IS LOANED, OR IS RENTED, MAKE SURE THAT THE OPERATOR UNDERSTANDS THE TWO INSTRUCTIONS BELOW.

BEFORE THE OPERATOR STARTS THE ENGINE:

1. GIVE INSTRUCTIONS TO THE OPERATOR ON SAFE AND CORRECT USE OF THE MACHINE.
2. MAKE SURE THE OPERATOR READS AND UNDERSTANDS THE OPERATOR'S MANUAL FOR THIS MACHINE.

WARNING

IMPROPER OPERATION OF THIS MACHINE CAN CAUSE INJURY OR DEATH.

BEFORE STARTING THE ENGINE, DO THE FOLLOWING:

1. READ THE OPERATOR'S MANUAL.
2. READ ALL SAFETY DECALS ON THE MACHINE.
3. CLEAR THE AREA OF OTHER PERSONS.

LEARN AND PRACTICE SAFE USE OF MACHINE CONTROLS IN A SAFE, CLEAR AREA BEFORE YOU OPERATE THIS MACHINE ON A JOB SITE.

It is your responsibility to observe pertinent laws and regulations and to follow manufacturer's instructions on machine operation and maintenance.

See your Authorized Case dealer for additional operator's manuals, parts catalogs, and service manuals.

To the Purchaser of a Case Tractor,

The care you give your new Case Tractor will greatly determine the satisfaction and service life you will obtain from it. Use this manual as your guide. By observing the instructions and suggestions in this manual, your Case Tractor will serve you well for many years.

As an Authorized Case Dealer, we stock Genuine Case Parts, which are manufactured with the same precision and skill as the original equipment. Our factory trained staff is kept well informed on the best methods of servicing Case equipment and is ready and able to help you.

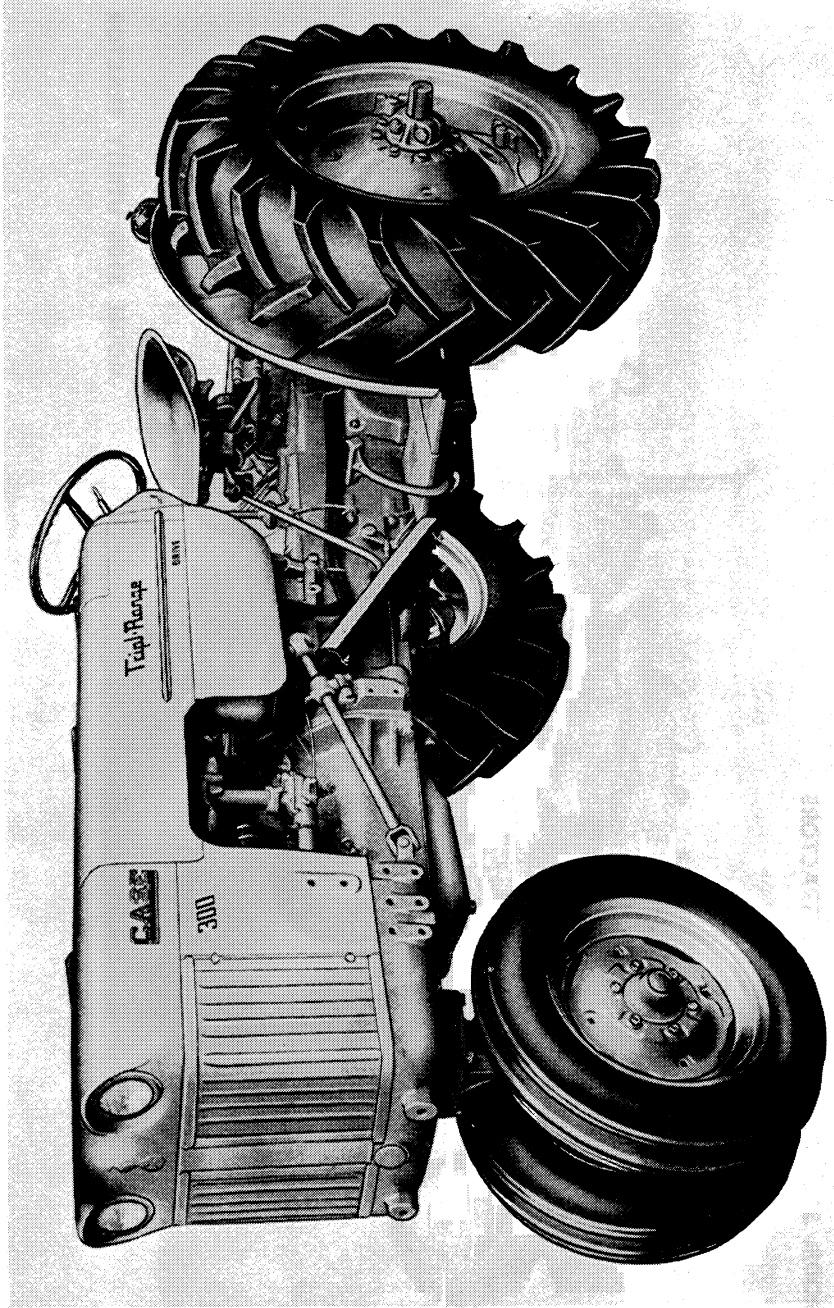
Should you require additional aid or information, contact us.

*Your Authorized
CASE DEALER*

To insure efficient and prompt service, please furnish us with the Model and Serial Number of your tractor and Serial Number of your engine, in all correspondence or contacts.

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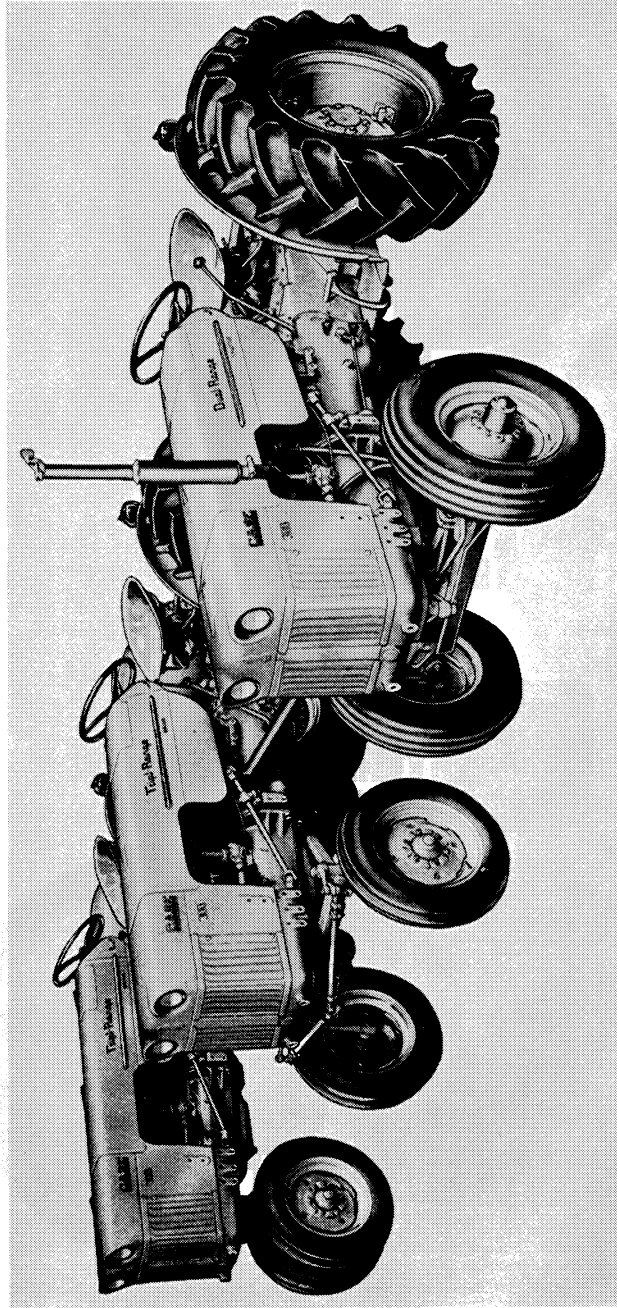


CASE MODEL 311B GENERAL PURPOSE TRACTOR WITH TRIPLE-RANGE DRIVE

INTRODUCTION

(CASE "300B" SERIES TRACTORS)

MODEL 311B GENERAL PURPOSE TRACTORS



MODEL 310B UTILITY TRACTOR

INTRODUCTION

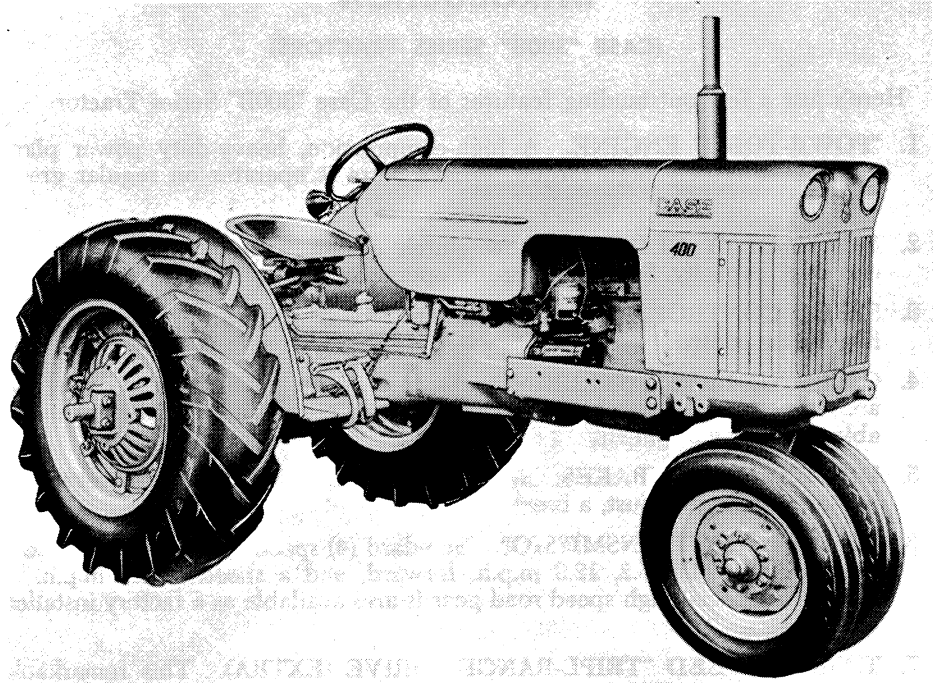
(CASE "300B" SERIES TRACTORS)

Here's just a few outstanding features of the Case "300B" Series Tractor:

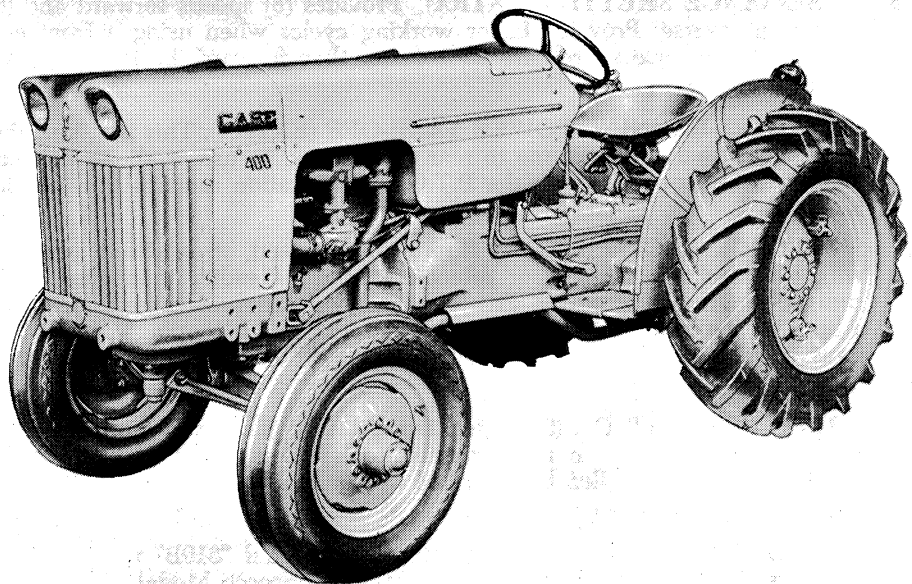
1. **"POWR-TORQ" ENGINE.** A high-compression, heavy-duty power plant with an extremely high torque. What's more it operates on regular grade gasoline.
2. **HEAVY-DUTY CLUTCH.** New clutch design with 50% more "torque-carrying" capacity. Smooth, long-life operation.
3. **SPEED CONTROL.** "All-Steel" friction type hand throttle with finger tip, finger-ease control.
4. **CAM AND LEVER STEERING.** Smooth-as-silk, shock-proof steering for accurate, instant control of front wheels. Power steering attachment available as extra equipment.
5. **DIFFERENTIAL BRAKES.** High-capacity 6-inch double-disk, velvet touch, brakes. Simple to adjust, a breeze to service
6. **HEAVY-DUTY TRANSMISSION.** Standard (4) speed transmission provides speeds of 2.7, 4.0, 5.2, 12.9 m.p.h. forward, and a speed of 3.2 m.p.h. in reverse. A special high speed road gear is also available as a factory installed extra.
7. **TWELVE-SPEED "TRIPL-RANGE" DRIVE (EXTRA).** This remarkable power train provides forward speeds from 1.6 to 21.5 m.p.h. and reverse speeds from 1.9 to 5.4 m.p.h. (see page 11).
8. **DUAL-RANGE SHUTTLE (EXTRA).** Provides (8) speeds forward and (8) speeds in reverse. Provides faster working cycles when using a front end loader since reverse speeds are 25% faster than forward, in any gear. (see page 11).
9. **CONSTANT-RUNNING POWER TAKE-OFF (EXTRA).** This is a "straight-line" power shaft from engine to rear shifter fork. In use, it allows the rear wheels to be stopped, while the P.T.O. shaft rotation remains at a normal 533 r.p.m..
10. **SNAP-LOCK EAGLE HITCH.** Improved, enclosed, streamlined assembly with quick, simple implement attaching points. Handier than ever, more compact, more lifting power, greater ease of operation. And for your safety a built-in "hydraulic interlock" to prevent accidental "dropping" of mounted tools. Double control and remote cylinder system can easily be attached at any time.
11. **THREE POINT HITCH (Swinging Draft Arms).** This is an optional hitch which will accommodate rear-mounted tools other than Case. This hitch is actuated and controlled by the same hydraulic system as the Eagle Hitch linkage.
12. **CHOICE OF MODELS.** 1. A low-silhouette Model "310B" utility tractor with a solid front axle. 2. A standard general purpose Model "311B" with dual front wheels. This model is also available with an adjustable front axle as extra equipment.

INTRODUCTION

(CASE "400B" SERIES CASE-O-MATIC TRACTORS)



MODEL 411B GENERAL PURPOSE TRACTOR



MODEL 410B UTILITY TRACTOR

INTRODUCTION

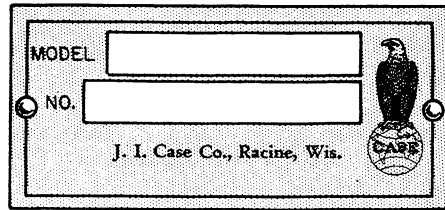
(CASE "400B" SERIES TRACTORS)

1. **"POWR-TORQ" ENGINE.** A high-compression, heavy-duty power plant with an extremely high torque. What's more it operates on regular grade gasoline. L. P. Gas engines are also available as optional equipment.
2. **CASE-O-MATIC DRIVE.** Gives you extra work power, automatically, as you need it. No jerking — no stalling — just select the proper transmission working range, open the throttle and go to work! "Case-O-Matic" drive doubles the pulling power in tough going, without shifting. "Case-O-Matic" drive permits automatically slower ground speed without slowing power take-off operation — allows the driven machine to clear itself without stopping, shifting or clutching your tractor.
3. **DUAL-RANGE DRIVE (Extra).** This transmission, coupled with the Case-O-Matic torque converter, provides the operator with 8 speeds forward and 2 in reverse (two complete working ranges). The standard 4 speed transmission is also available with an optional high-speed road gear installed.
4. **DUAL-RANGE SHUTTLE (Extra).** Provides (8) speeds forward and (8) speeds in reverse. Provides faster working cycles when using a front end loader since reverse speeds are 25% faster than forward, in any gear.
5. **DIFFERENTIAL BRAKES.** High-capacity 6-inch double-disk, velvet touch, brakes. Simple to adjust, a breeze to service. A "Lock-A-Matic" parking latch releases automatically when brakes are reapplied.
6. **INDEPENDENT POWER TAKE-OFF (Extra).** Hand operated clutch permits engagement or disengagement of power take-off without stopping forward travel of tractor. Output shaft rotates at 541 r.p.m., (at 1970 engine r.p.m.)
7. **BELT PULLEY-REAR MOUNTED (Extra).** This attachment is attached to and driven from the power take-off. Pulley measures 10 $\frac{1}{4}$ " x 6" and rotates at 1180 r.p.m. (at 2000 engine r.p.m.)
8. **SNAP-LOCK EAGLE-HITCH.** Improved, enclosed, streamlined assembly with quick, simple implement attaching points. Handier than ever, more compact, more lifting power, greater ease of operation. And for your safety a built-in "hydraulic interlock" to prevent accidental "dropping" of mounted tools. Double control and remote cylinder system can easily be attached at any time.
9. **THREE-POINT HITCH (Swinging Draft Arms).** This is an optional hitch which will accommodate rear-mounted tools other than Case. This hitch is actuated and controlled by the same hydraulic system as the Eagle Hitch linkage.
10. **CHOICE OF MODELS.** 1. A low-silhouette Model "410B" utility tractor with a solid front axle. 2. A standard general purpose Model "411B" with dual front wheels. This model is also available with an adjustable front axle as extra equipment.

TRACTOR SERIAL NUMBERS

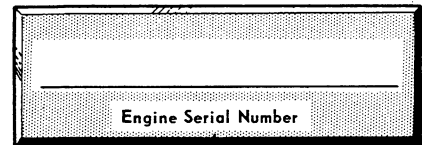
When ordering parts from your Authorized Case Dealer, always specify the Serial Number and Model of your Tractor.

As a means of ready reference fill in the serial numbers along with the model number of your tractor, in the spaces provided here.



A rectangular form with a double-line border. On the left side, the word "MODEL" is printed above a rectangular box, and "NO." is printed above another rectangular box. To the right of these boxes is a small illustration of a Case tractor. Below the boxes, the text "J. I. Case Co., Racine, Wis." is printed, followed by a small circular logo with the word "CASE" inside.

When ordering Tractor Parts, specify the Tractor Model and Serial Number, located on the tractor "dash."



A rectangular form with a double-line border. A horizontal line runs across the middle of the form, and the text "Engine Serial Number" is printed below this line.

Use the Engine Serial Number, stamped on the right side of the engine block, when ordering Engine Parts.

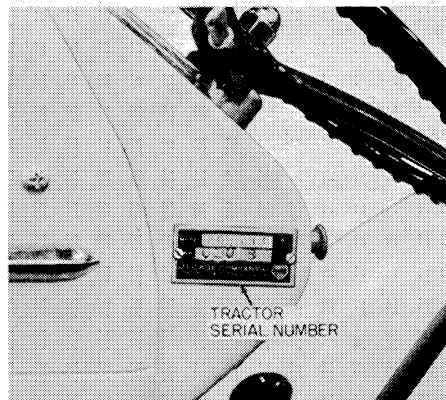


Fig. 1. Tractor Number

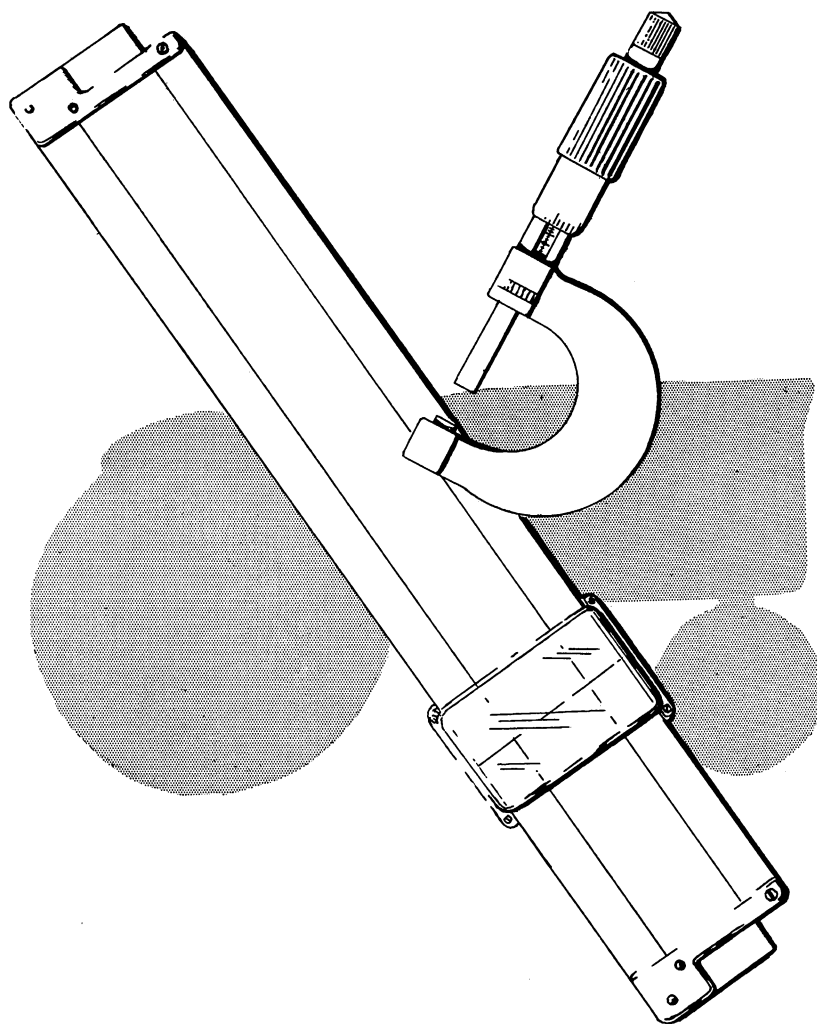


Fig. 2. Engine Number

The information compiled in this manual covers the operation and preventive maintenance on both the Case "300B" and "400B" Tractors. It is our hope that this manual will help you to understand the correct care and use of these tractors.

If you should require additional information or services of a trained mechanic, be sure to see your authorized CASE DEALER.

NOTE: The terms "Right Hand" and "Left Hand" whenever used in this manual apply to the tractor when facing in the direction the tractor will move in forward operation.



GENERAL SPECIFICATIONS

GENERAL SPECIFICATIONS

ENGINE (GASOLINE)

GENERAL

Type	Four Cylinder; Overhead Valve
Firing Order	1 - 3 - 4 - 2
Cylinder Bore	3 ³ / ₈ inches
Stroke	4 ¹ / ₈ inches
Piston Displacement	148 cubic inches
Compression Ratio (Gasoline)	7.1 to 1
Compression Ratio (High Altitude or L.P. Gas)	8.5 to 1
Valve Guides	Replaceable
Exhaust Valve Rotators (Gasoline only)	Positive Type
Valve Clearance014 (cold)
Cylinder Sleeves	Wet Replaceable Type
Air Cleaner	Oil Bath Type
Full Load Engine Speed ("300B")	1900 R.P.M.
No Load Engine Speed ("300B")	2050 R.P.M.
Full Load Engine Speed ("400B")	2000 R.P.M.
No Load Engine Speed ("400B")	2125 R.P.M.
Engine Idling Speed	500 R.P.M.
Governor Type	Case Sensitive Flyweight
Engine Speed Control	Friction Type Hand Control Foot Throttle Control (Extra)

PISTONS AND RODS

Rings Per Piston	4
Number of Compression Rings	3
Number of Oil Rings	1
Piston Pins	Full Floating
Connecting Rod Bearings	Precision Insert Type

MAIN BEARINGS

Number of Bearings	3
Type of Bearings	Precision Insert Type

ENGINE LUBRICATION SYSTEM

Oil Pressure	14-20 lbs. (at 1900 R.P.M.)
Oil Pump	Gear Type With Floating Intake
Oil Filter (extra)	Replaceable Cartridge

FUEL SYSTEM

Carburetor	1-1/4" S.A.E. Flange
Fuel Strainer	In Sediment Bowl Under Tank
Fuel Gage	Electric, Instrument Panel Dial

COOLING SYSTEM

Pressurized System with 4 lb. Pressure Cap	
Radiator	Tube and Fin Construction
Temperature Control	Thermostat
Fan	16" Four Blade, Belt Driven
Water Pump	Pre-lubricated bearings

ELECTRICAL AND IGNITION SYSTEM

Ignition Switch	Includes Key Starting
Battery (dry charge type)	12 Volt, 50 Amp. Hr. Positive Post Grounded
Spark Plugs: Champion No. D16 (or equivalent).....	Thread 18 mm, Gap .025"
Distributor (Standard)	Automatic Advance 26°
	Point Gap — .020"
Magneto (Optional) Case No. 41	Magneto Advance 25°
	Point Gap — .008" — .012"
Generator (3-brush type) Third brush not adjustable	With Voltage Regulator
Starting Motor	With Sealed Starter Drive
Head Lights	12 Volt, Sealed Beam Units
Rear Light	12 Volt, Combination Tail and Flood with Electrical Outlet for Safety Light Attachment
Fuse	20 Amp. in Light Circuit

("300B" SERIES) FLYWHEEL CLUTCH (FOOT OPERATED)

Type Single Plate, Dry Disk, (91/4" dia.)
Throw-Out Bearing Sealed, Ball-Thrust

"CASE-O-MATIC" DRIVE ("400B")

“Case-O-Matic” Drive	11” Torque Converter
Main Drive Actuation Clutch	Foot Pedal Control
Direct Drive Lock-up Clutch	Hand Lever Control

TRANSMISSION OPTIONS

Standard Transmission ("300B" and "400B")	4 forward; 1 reverse
	*High speed 4th gear (optional)
Tripl-Range Drive ("300B")	12 forward; 3 reverse
"Case-O-Matic" Dual Range ("400B")	8 forward; 2 reverse
	*High speed road gear (optional)
Dual Range Shuttle ("300B" and "400B").....	8 forward; 8 reverse
	(High speed road gear standard)

BRAKES

Type Heavy Duty, 6-inch Double Disk Differential Brakes
Pedals Can Be Locked Together or Operated Independently
 "Lock-A-Matic" Pedal Catch for Parking or Belt Work

STEERING GEAR AND FRONT AXLES

Steering Gear TypeCam and Lever gear with center-line control
Front Axle Type.....Gen. Purp. Tractors; Dual or Adjustable Front Axles
Utility Tractors, Fixed Front Axle
Power Steering AttachmentUtility Tractors Only

CONSTANT-RUNNING POWER TAKE-OFF ("300B" SERIES)

Method of Engagement	Tractor Foot Clutch Pedal
Rotation	Clockwise (from rear of tractor)
Output Shaft	Standard 1-3/8" A.S.A.E. spline
Speed	533 R.P.M. (at 1750 Engine R.P.M.)

*Factory Installation Only.

INDEPENDENT POWER TAKE-OFF ("400B" SERIES)

Method of Engagement Hand Operated Clutch Lever
Rotation Clockwise (from rear of tractor)
Output Shaft Standard 1-3/8" A.S.A.E. spline
Speed 541 R.P.M. (at 1970 Engine R.P.M.)

("300B") SIDE MOUNTED BELT PULLEY ATTACHMENT (EXTRA)

Pulley Diameter 9 1/4" Face Width 6 3/8"
Full Load Speed 1290 R.P.M. @ 1900 engine R.P.M.
Belt Speed Per Min., Full Load 3125 F.P.M.

("400B") REAR MOUNTED BELT PULLEY ATTACHMENT (EXTRA)

Pulley Diameter 10 1/4" Face Width 6"
Full Load Speed 1180 R.P.M. @ 2000 engine R.P.M.
Belt Speed Per Min. 3060 F.P.M.

EAGLE HITCH AND HYDRAULIC SYSTEM

Type System Single-Acting with Floating Piston
Hydraulic Pump Continuous Running, Built-in Relief Valve
Relief Valve Pressure 1200 to 1300 P.S.I.
Control Hand operated (With Adjustable Limit Stops)
Filter Edge-Wound Paper Element (Removable for Cleaning)
Safety Interlock Built-in Unit, Prevents Accidental "Dropping" of Implements
Fluid Recommendations S.A.E. 10W (MS-DG Grade) Engine Oil

REMOTE (PORTABLE) CONTROL SYSTEM (EXTRA)

Remote (Portable Cylinder) 3-1/4" inch dia. 8" inch Stroke
Remote Cylinder Control Stacked Control Valve with Matched Controls
and Control Lever
Remote Cylinder Couplings Case Quick-Detachable Breakaway Couplings
with Dust Plugs

THREE-POINT HITCH (SWINGING DRAFT ARMS) (EXTRA)

Type Flexible Swinging Draft Arms with Ball Couplers
Hydraulic System Same System and Controls as Eagle Hitch
Stabilizer Bars and Stay Chains Available for Rigid Draft Arm Action

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perfect and complete manual in
the world immediately.

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