# 430 Series Gasoline Tractor

**Operators Manual** 

9-902

CASE II

Reprinted

This SAF com the poss

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.



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.

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#### 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

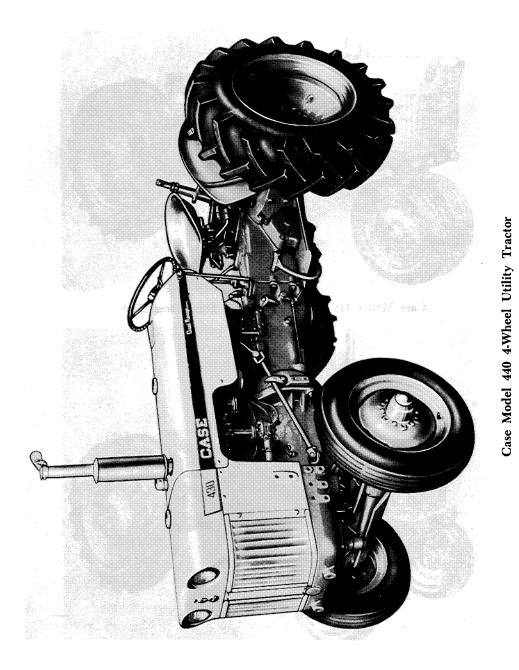
To insure efficient and prompt service, please furnish us with the Model and Serial Number of your tractor and Serial Number of your engine, in all correspondence or contacts.

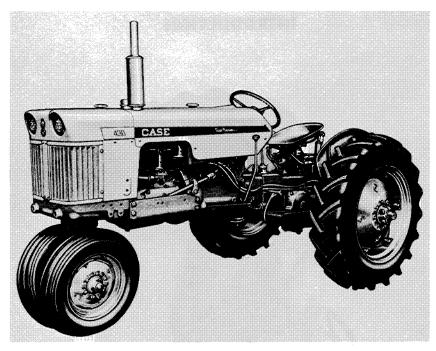
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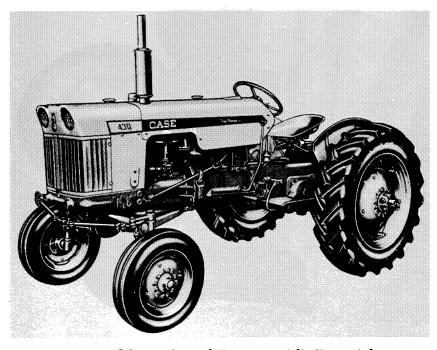
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# INTRODUCTION





Case Model 441 General Purpose - Dual Front End



Case Model 441 General Purpose - Adj. Front Axle

#### INTRODUCTION

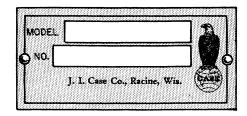
Here's just a few outstanding features of the Case "440-441" Model Tractors:

- 1. "POWR-TORQ" ENGINE. A high-compression, heavy-duty 148 cubic inch with an extremely high torque. What's more it operates on regular grade gasoline. Spin on full-flow oil filter.
- 2. HEAVY-DUTY CLUTCH. New clutch design with 50% more "torque-carrying" capacity. Smooth, long-life operation.
- 3. SPEED CONTROL. "All-Speed" friction type hand throttle with finger tip, finger-ease control.
- 4. CAM AND LEVER STEERING. Smooth-as-silk, shockproof steering for accurate, instant control of front wheels. Power steering attachment available for either utility or general purpose tractors.
- 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-RANCE 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 "straightline" 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 normal speed.
- 10. EAGLE-HITCH (EXTRA). 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) (EXTRA). 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. SAFETY STARTING. Combination of ignition switch and transmission safety switch.
- 13. CHOICE OF MODELS. 1. A low-silhouette Model "440" utility tractor with a solid front axle. 2. A standard general purpose Model "441" with dual front wheels. This model is also available with an adjustable front axle as extra equipment.

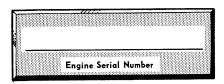
#### TRACTOR SERIAL NUMBERS

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.



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



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

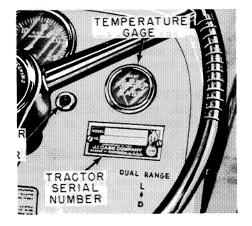


Fig. 1. Tractor Number

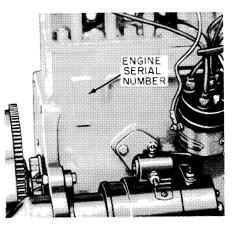
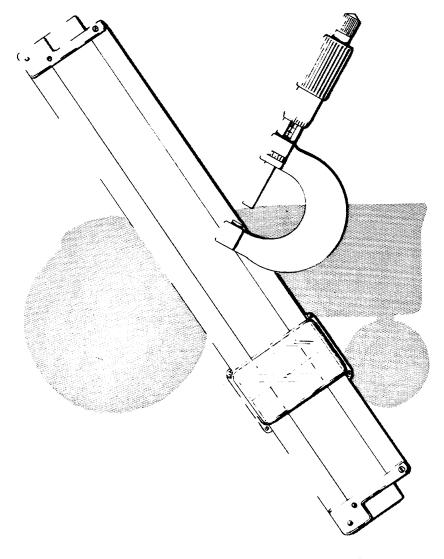


Fig. 2. Engine Number

The information compiled in this manual covers the operation and preventive maintenance on the Case "440-441" Tractors. It is our hope that this manual will help you to understand the correct care and use of this tractor.

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 F	Cour Cylinder; Overhead Valve
Firing Order	1 - 3 - 4 - 2
Cylinder Bore	//////////////////////////////////////
Diston District and the second s	149 subic inches
Piston Displacement	146 cubic menes
Compression Ratio	
Valve Guides	Replaceable
Exhaust Valve Rotators	
Valve Clearance	
Cylinder Sleeves	Wet Replaceable Type
Air Cleaner	Oil Bath Type
Full Load Engine Speed	
No Load Engine Speed	
Engine Idling Speed	
Governor Type	Case Sensitive Flyweight
Engine Speed Control Cor	
	Control and Foot Control
	Control and I oot Control

#### PISTONS AND RODS

Rings Per Piston 4   Number of Compression Rings 3   Number of Oil Rings 1	3
Piston Pins Connecting Rod Bearings Full Floating Precision Insert Type	5

#### MAIN BEARINGS

Number of Bearings		3
Type of Bearings	Precision Insert Typ	pe

#### ENGINE LUBRICATION SYSTEM

Oil Pressure	
	Gear Type with Floating Intake
Oil Filter	Full Flow–Replaceable cartridge element

#### FUEL SYSTEM

Carbu	iretor	 	 . 1″ 5	5.A.E. F	lange

#### COOLING SYSTEM

Pressurized System with 4 lb. Pressure Cap

Radiator	Tube and Fin Construction
Temperature	Control
Fan	
Water Pump	Sealed, Pre-lubricated Bearings

#### ELECTRICAL AND IGNITION SYSTEM

Ignition SwitchKey Locking TypeBattery (dry charge type)12 Volt, 50 Amp. Hr. Positive Post GroundedSpark Plugs: Champion #D16; AC-86 Comm. or equivalentThread 18 mm.<br/>Gap .025"DistributorAutomatic Advance 26°<br/>Point Gap - .020"Generator (3-brush type) Third brush not adjustableWith Voltage Regulator<br/>With Sealed Starter Drive<br/>Head LightsHead Lights12 Volt, Combination Tail and Flood with Electrical Outlet<br/>for Safety Light AttachmentFuse (Dash Location)20 Amp. in Light Circuit

#### FLYWHEEL CLUTCH (FOOT OPERATED)

Type (Std. 4-Speed or Tripl-Range)Single Plate, Dry Disk, (94" dia.)Type (Dual Range Shuttle)Single Plate, Dry Disk, (11" dia.)Throw-Out BearingSealed, Ball-Thrust

#### STANDARD TRANSMISSION

Speeds (4) Forward; (1) Reverse †High Speed 4th Gear (Optional Equipment)

#### TRIPL-RANGE DRIVE (OPTIONAL)

Speeds Provides (12) Speeds Forward, and (3) Speeds Reverse

#### **†**°DUAL RANGE SHUTTLE (OPTIONAL - UTILITY ONLY)

Speeds ..... Provides (8) Speeds Forward and (8) Speeds Reverse with High Speed 4th Gear and Heavy Duty Clutch \*(Cannot be used with Constant-Running P.T.O., Tripl-Range or Belt Pulley)

#### BRAKES

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

#### STEERING GEAR AND FRONT AXLES

Steering Gear Type Cam and Lever gear with center-line control Front Axle Type Model 441 Tractors; Dual or Adjustable Front Axles Model 440 Utility Tractors, Fixed Front Axle

#### STANDARD POWER TAKE-OFF (OPTIONAL)

Output Shaft	Clockwise (from rear)
Speed	Hand Shift Rod at Rear of Tractor
Height from Drawbar to Centerline of P.I	C.O. Shaft 10"

†Factory Installation Only

#### (With Multiple Plate Clutch)

Output Shaft Size, Rotation and Position (same as standard P.T.O.) Method of Engaging Tractor Foot Clutch Pedal Hand Lever (To Control Engine Power to Tractor Rear Wheels) Size and Type of Clutch Wet Type - 5 inch Dia., 11 plate

#### **BELT PULLEY ATTACHMENT (EXTRA)**

#### EAGLE HITCH AND HYDRAULIC SYSTEM (OPTIONAL)

Type System	Single acting with Floating Piston
Hydraulic Pump	Continuous Running
Belief Valve Pressure	1300-1500 P.S.I.
Control	Hand operated (with Adjustable Limit Stops)
Filter	Edge-Wound Paper Element (replaceable)
Safety Interlock Built-in Unit.	Prevents Accidental "Dropping" of Implements
Fluid Recommendations	S.A.E. 10W-30 Multi-Viscosity Engine Oil

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

TypeFlexible Swinging Draft Arms with Ball CouplersHydraulic SystemSame System and Controls as Eagle HitchStabilizer Bars and Stay Chains Available for Rigid Draft Arm Action

#### REMOTE (PORTABLE) CONTROL SYSTEM (EXTRA)

Remote (Portable Cylinder) Remote Cylinder Control	Stacked Control Valve	3¼" Dia. 8" Stroke with Matched Controls
Remote Gymael Conderse		and Control Lever
Remote Cylinder Couplings	Case Quick-Detachable	Breakaway Couplings with Dust Plugs

#### APPROXIMATE CAPACITIES

US

Imperial

		0.3.	Imperiar
Cooling System	(Ouarts)	12	10.02
Engine Crankcase	(Ouarts)	4	3.34
(with filter)	(Quarts)	5	4.18
Air Cleaner Oil Cup	(Pints)	1	0.83
Fuel Tank	(Gallons)	13	10.86
Hydraulic System (Torque Tube)	See Page 15		
Transmission Case (Model 441)	(Gallons)	6	5.01
	(Quarts)	17	14.20
Transmission Case (Model 440)	(Quarts)	1.	

# TIRE AND WHEEL EQUIPMENT

	General Purpose Tractor	Utility Tractor
Front Tires (Standard)	5.00-15 - 4 Ply	5.50-16 - 4 Ply
Front Tires (Optional)		7.50-16 - 4 Ply
Front Tires (Optional)		6.00-16 - 6 Ply
Rear Tires (Standard)	10-28 - 4 Ply	10-24 - 4 Ply
Rear Tires (Optional)		11-24 - 4 Ply
Rear Tires (Optional)	12.4-28 - 4 Ply	13-24 - 6 Ply

#### APPROXIMATE TRAVEL SPEEDS (1750 R.P.M.)

Standard	General Purpos	se Tractor	Utility Tractor			
Transmission	10-28 Tires	11-28 Tires	10-24 Tires	11-24 Tires		
First Speed	2.5 m.p.h.	2.6 m.p.h.	2.3 m.p.h.	2.4 m.p.h.		
Second Speed	3.7 m.p.h.	3.8 m.p.h.	3.3 m.p.h.	3.5 m.p.h.		
Third Speed	4.8 m.p.h.	5.0 m.p.h.	4.4 m.p.h.	4.6 m.p.h.		
Fourth Speed	11.9 m.p.h.	12.4 m.p.h.	10.8 m.p.h.	11.3 m.p.h.		
Reverse	3.0 m.p.h.	3.0 m.p.h.	2.7 m.p.h.	2.8 m.p.h.		
Tripl-Range	General Pur	pose Tractor	Utility Tractor			
Drive	10-28 Tires	11-28 Tires	10-24 Tires	11-24 Tires		
First Speed	1.5 m.p.h.	1.6 m.p.h.	1.4 m.p.h.	1.4 m.p.h.		
Second Speed	2.2 m.p.h.	2.3 m.p.h.	2.0 m.p.h.	2.1 m.p.h.		
Third Speed	2.5 m.p.h.	2.6 m.p.h.	2.3 m.p.h.	2.4 m.p.h.		
Fourth Speed	2.9 m.p.h.	3.0 m.p.h.	2.6 m.p.h.	2.7 m.p.h.		
Fifth Speed	3.7 m.p.h.	3.8 m.p.h.	3.3 m.p.h.	3.5 m.p.h.		
Sixth Speed	4.2 m.p.h.	4.3 m.p.h.	3.8 m.p.h.	4.0 m.p.h.		
Seventh Speed	4.8 m.p.h.	5.0 m.p.h.	4.4 m.p.h.	4.6 m.p.h.		
Eighth Speed	6.0 m.p.h.	6.3 m.p.h.	5.5 m.p.h.	5.8 m.p.h.		
Ninth Speed	8.0 m.p.h.	7.4 m.p.h.	6.5 m.p.h.	6.8 m.p.h.		
Tenth Speed	11.3 m.p.h.	8.3 m.p.h.	7.3 m.p.h.	7.6 m.p.h.		
Eleventh Speed	11.9 m.p.h.	12.4 m.p.h.	10.8 m.p.h.	11.3 m.p.h.		
Twelfth Speed	19.8 m.p.h.	20.6 m.p.h.	18.0 m.p.h.	18.8 m.p.h.		
First Reverse	1.8 m.p.h.	1.8 m.p.h.	1.6 m.p.h.	1.7 m.p.h.		
Second Reverse	3.0 m.p.h.	3.1 m.p.h.		2.8 m.p.h.		
Third Reverse	4.9 m.p.h.	5.1 m.p.h.	4.5 m.p.h.	4.7 m.p.h.		

**DUAL-RANGE SHUTTLE SPEEDS\*** 

		Low Range			Direct Range			
	lst	2nd	3rd	4th	1st	2nd	3rd	4th
Forward Reverse	1.4 1.7	2.1 2.6	2.7 3.4	9.2 11.4	2.3 2.8	3.3 4.1	4.4 5.4	14.8 18.4

Γ

\*@1750 R.P.M. with 10-24 Tires

		Low Range			Direct Range			
	lst	2nd	3rd	4th	1st	2nd	3rd	4th
Forward Reverse	1.6 2.0	2.4 2.9	3.1 3.9	10.6 13.1	2.6 3.2	3.8 4.7	5.0 6.2	16.9 21.0

\*@1750 R.P.M. with 13-24 Tires

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