

# **470-570 Tractors**

## **Operators Manual**

9-2402



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.



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*



**LOOK FOR THIS SYMBOL TO POINT  
OUT IMPORTANT SAFETY PRECAUTIONS**

To insure efficient and prompt service, please furnish us with the Model, Serial and Engine Numbers of your Tractor in all correspondence or contacts.

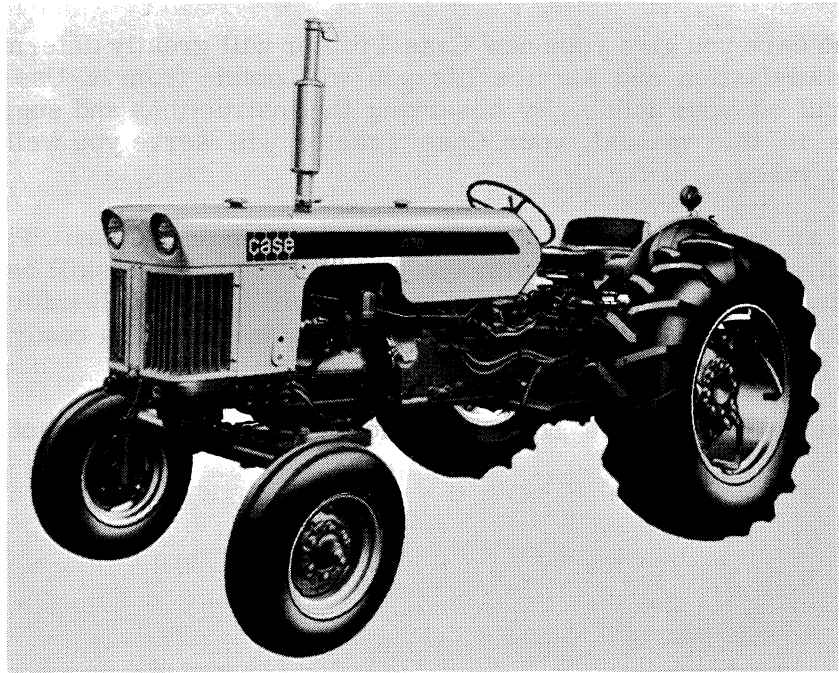


Figure 1. 470 Tractor

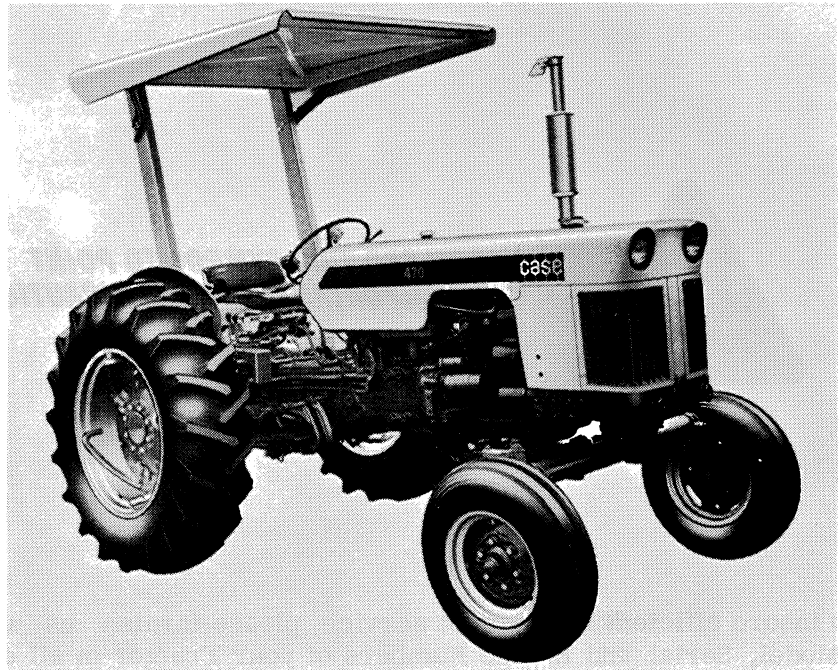


Figure 2. 470 Tractor with Canopy

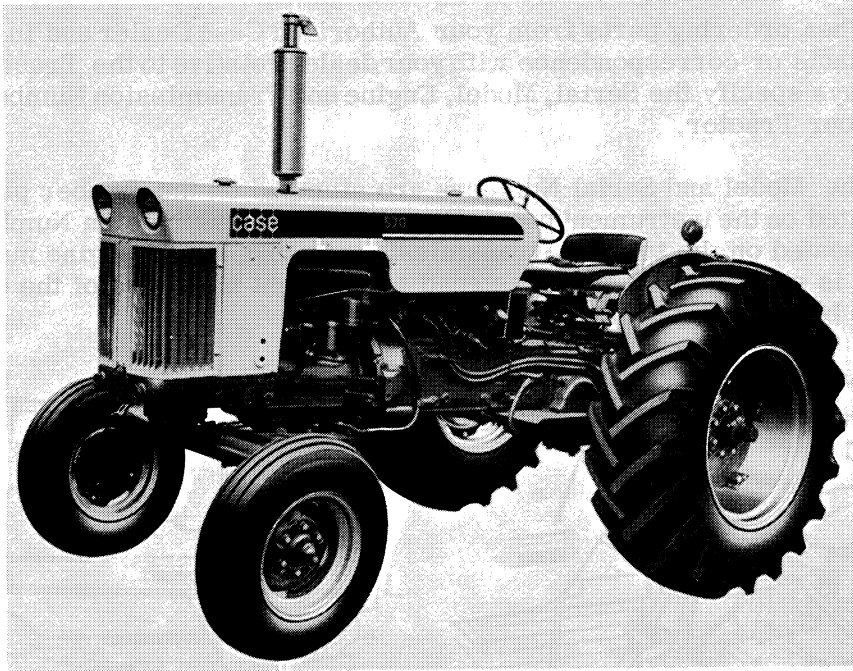


Figure 3. 570 Tractor

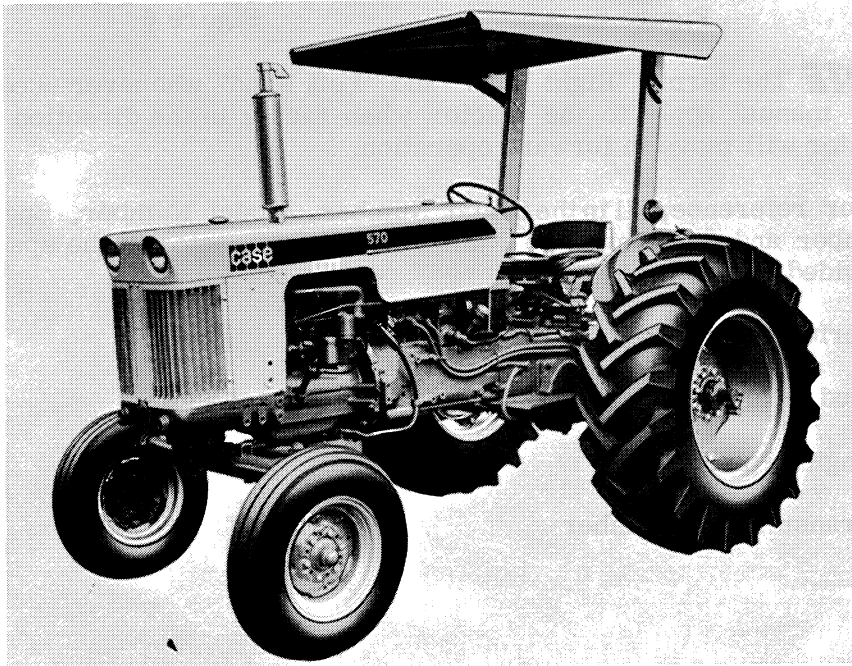


Figure 4. 570 Tractor with Canopy

## SERIAL NUMBER

When ordering parts from your Authorized Case Dealer and in all contacts or correspondence with your dealer relative to the Tractor, always specify the Serial, Model, Engine and Transmission Numbers of your Tractor.

The Model and Serial Numbers are stamped on the number plate located on the instrument panel, Figure 5. The Transmission Number is located on the top of the transmission, Figure 5. The engine number is stamped on a plate fastened to the right hand side of the engine below the starting motor, Figure 6.

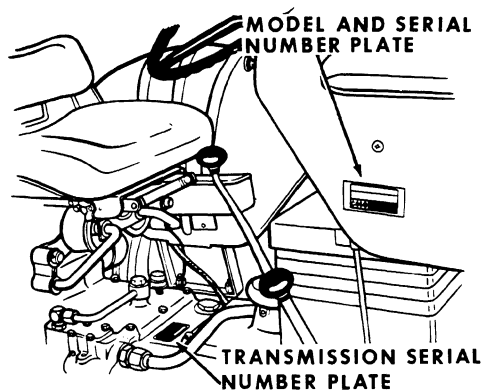


Figure 5

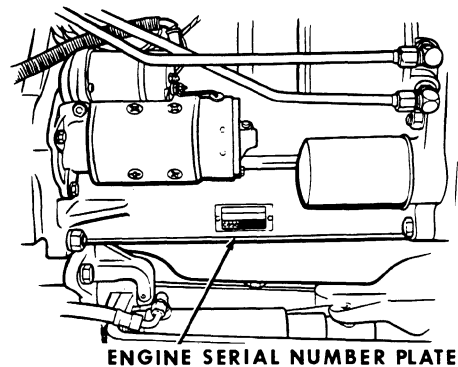


Figure 6

**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.

For reference, fill in the Serial Number, Model Number, Engine Number and Transmission Number of your Tractor in the spaces provided below.

Serial Number

Model Number

Engine Number

Transmission Number

# 188 diesel engine

## SPECIFICATIONS

### General

Type ----- "Case" Open Chamber Combustion-  
4 Cyl. - Valve in Head.  
Firing Order ----- 1-3-4-2  
Cylinder Bore ----- 3-13/16"  
Stroke ----- 4-1/8"  
Piston Displacement ----- 188 Cu. In.  
Compression Ratio ----- 17.5 to 1  
\*Valve Clearance (Intake and Exhaust) ----- .014 (Hot)  
Cylinder Sleeves ----- Wet Type Replaceable  
Engine Idle Speed ----- 600 RPM  
Full Load Speed (470 Series) ----- 1750 RPM  
Full Load Speed (570 Series) Standard Clutch ----- 1900 RPM  
Full Load Speed (570 Series) Case-O-Matic ----- 2100 RPM  
No Load Speed (470 Series) ----- 1900 RPM  
No Load Speed (570 Series) Standard Clutch ----- 2060 RPM  
No Load Speed (570 Series) Case-O-Matic ----- 2250 RPM  
Air Cleaner ----- Oil Bath Type  
Cold Weather Starting Aid ----- Electric Heater - Manifold Type  
Fuel Recommendation ----- No. 2 Diesel Fuel

### Piston and Connecting Rods

Compression Rings ----- 2  
Oil Rings ----- 1  
Piston Pins ----- Full Floating Type  
Connecting Rod Bearings ----- Replaceable Precision  
Steel Back Aluminum  
Liners.

### Main Bearings

Number of Main Bearings ----- 5  
Type Bearings ----- Replaceable Precision  
Steel Back Aluminum  
Liners.

\*Hot Settings Are Made At Low Idle After the Engine has Operated  
At Thermostat Control Temperature For at Least Fifteen Minutes.

## Engine Lubricating System

Oil Pressure ----- 50 to 70 Lbs. with Engine Warm and  
Operating at Full Governed RPM.

Type System ----- Gear Type Pump  
With Floating Intake  
Screen.

## Fuel System

Fuel Injection Pump ----- Roosa - Master

Fuel Inectors ----- Long Stem Multi-Hole

Fuel Injectors Opening Pressures ----- 2800 PSI

Fuel Transfer Pump ----- Vane Type (Integral  
Part of Injection Pump)

Governor ----- Mechanical, Flyweight,  
(Integral Part of Injection  
Pump).

Primary Fuel Filter ----- Replaceable Element Type

Final Filter ----- Replaceable Filter Type

Fuel Gauge (570 Series) --- Electrical, Located on Instrument Panel

Fuel Tank Capacity (470 Series) ----- 13 U. S. Gallons  
(570 Series) ----- 22 U. S. Gallons



# 148 gasoline engine

## SPECIFICATIONS

### General

Type ----- 4 Cylinder, 4 Cycle  
Valve in Head.  
Firing Order ----- 1-3-4-2  
Cylinder Bore ----- 3-3/8 Inches  
Stroke ----- 4-1/8 Inches  
Piston Displacement ----- 148 Cubic Inches  
Compression Ratio ----- 7 to 1  
Exhaust Valve Rotators ----- Positive Type  
\*Valve Clearance (Intake and Exhaust) ----- .014" (Hot)  
Cylinder Sleeves ----- Wet Replaceable Type  
Engine Idle Speed ----- 600 RPM  
Full Load Speed (470 Series) ----- 1750 RPM  
No Load Speed (470 Series) ----- 1960 RPM  
Air Cleaner ----- Oil Bath Type

### Piston and Connecting Rods

Compression Rings ----- 3  
Oil Rings ----- 1  
Piston Pins ----- Full Floating Type  
Connecting Rod Bearings ----- Replaceable Precision  
Steel Back, Aluminum  
Liners.

### Main Bearings

Number of Bearings ----- 3  
Type of Bearings ----- Replaceable Precision  
Steel Back, Intermediate  
Copper-Lead Liners.

### Engine Lubricating System

Oil Pressure ----- 24 to 32 Lbs. With Engine  
Warm and Operating at Full Governed  
RPM.

\*Hot Settings Are Made At Low Idle After The Engine Has Operated  
At Thermostat Control Temperature For At Least Fifteen Minutes.

## Engine Lubricating System (Continued)

Oil Pump ----- Gear Type With Floating Intake Screen.

## Fuel System

Carburetor ----- 1" SAE Flange  
Fuel Strainer ----- In Sediment Bowl Under Fuel Tank.

Fuel Tank Capacity ----- 13 U. S. Gallons

## Distributor Ignition

Contact Point Gap ----- .020"

Dwell Angle ----- 42°

Ignition Timing at 1750 RPM (Checked with timing light) ----- 25°

Spark Plugs ----- Prestolite 18 8 or Equivalent.

Thread ----- 18 MM

Gap ----- .025"

Shank Length ----- 1/2"

# 159 gasoline engine

## SPECIFICATIONS

### General

Type ----- 4 Cylinder, 4 Cycle,  
Valve in Head.

Firing Order ----- 1-3-4-2

Cylinder Bore ----- 3-1/2 Inches

Stroke ----- 4-1/8 Inches

Piston Displacement ----- 159 Cubic Inches

Compression Ratio ----- 7.42 to 1

Exhaust Valve Rotators ----- Positive Type

\*Valve Clearance (Intake and Exhaust) ----- .014" (Hot)

Cylinder Sleeves ----- Wet Replaceable Type

Engine Idle Speed ----- 600 RPM

Full Load Speed (570 Series) Standard Clutch ----- 1900 RPM

Full Load Speed (570 Series) Case-O-Matic ----- 2100 RPM

No Load Speed (570 Series) Standard Clutch ----- 2060 RPM

No Load Speed (570 Series) Case-O-Matic ----- 2250 RPM

### Piston and Connecting Rods

Compression Rings ----- 3

Oil Rings ----- 1

Piston Pins ----- Full Floating Type

Connecting Rod Bearings ----- Replaceable Precision  
Steel Back, Aluminum  
Liners.

### Main Bearings

Number of Bearings ----- 3

Type of Bearings ----- Replaceable Precision  
Steel Back, Intermediate  
Copper-Lead Liners.

### Engine Lubricating System

Oil Pressure ----- 24 - 32 Lbs. (With Engine Warm  
and Operating at Full Governed RPM).

\*Hot Settings Are Made At Low Idle After The Engine Has Operated  
At Thermostat Control Temperature For At Least Fifteen Minutes.

## Engine Lubricating System (Continued)

Oil Pump ----- Gear Type With Floating Intake Screen.

## FUEL SYSTEM

Carburetor ----- 1-1/4" SAE Flange  
Fuel Strainer ----- In Sediment Bowl Under Fuel Tank.

Fuel Gauge ----- Electrical, Located on Instrument Panel.

Fuel Tank Capacity ----- 22 U.S.Gallons

## Distributor Ignition

Contact Point Gap ----- .020"

Dwell Angle ----- 42°

Ignition Timing (Checked with Timing Light)

1900 RPM (Standard Clutch) ----- 30°

2100 RPM (Case-O-Matic) ----- 30°

Spark Plugs ----- Prestolite 18 8 or Equivalent

Thread ----- 18 MM

Gap ----- .025"

Shank Length ----- 1/2"

# *general specifications*

## **Cooling System**

Type of System----- Pressurized, Thermostat Controlled:  
Forced Circulation (Impeller Type  
Pump.  
Radiator ----- Heavy Duty Fin and Tube Type  
Thermostat ----- Starts to Open At Approximately 177°F.  
Fully Open at 202°F.  
Pressure Cap Required ----- 4 PSI

## **Electrical System**

Type of System ----- 12 Volt Negative Ground  
Batteries (Diesel) ----- (1) 12 Volt Battery Group Size  
30H, Rated at 1.255 to 1.265 Specific  
Gravity, Discharge Rate 300 Amps at  
0°F., Voltage drops to 9.2 after 10  
Seconds, Voltage drops to 1.0 volt per  
cell after 4 minutes.  
(Spark Ignition) --- (1) 12Volt Battery Group Size 24,  
Rated at 1.25 to 1.265 Specific Gravity  
Discharge Rate 300 Amps at 0° F.,  
Voltage drops 6.7 after 10 seconds.  
Voltage drops to 1.0 volt per cell after  
3 minutes.  
Generator (If Equipped) ----- 12 Volt  
Voltage Regulator --- 12 Volt, 470-20 Amp., 570-25 Amp.  
Alternator (If Equipped) ----- 12 Volt, 35 Amp Output  
Voltage Regulator --- 12 Volt Solid State, Mounted on Al-  
ternator.  
Starting Motor ----- 12 Volt  
Head Lights ----- 12 Volt Sealed Beam  
Amber Warning Light ----- 12 Volt, Double Face, Flasher Type  
Rear Warning Light ----- 12 Volt Sealed Beam Combination  
Tail and Flood Lamp.  
Rear Stop and Tail Lights ----- 12 Volt  
Electrical Socket ----- 12 Volt for Auxiliary Light  
Fuse ----- 20 Amp. - Light Circuit - in panel

## **Brakes**

Type ----- Heavy Duty, Band and Double Disc,  
Differential Brakes.  
Brake Pedals ----- Can Be Locked Together for Road Travel or  
use individually for Steering Assistance.

## Case-O-Matic Drive

Main Power Clutch ----- Multiple Disc, Hydraulically Actuated,  
Engages Engine and Torque Converter  
with Transmission.  
Direct Drive Power-Clutch ----- Single Disc, Hydraulically Act-  
uated Engages Engine Directly with Main  
Power Clutch and Transmission, By-  
Passing Torque Converter.  
Type Torque Converter ----- 11 Inch, Single Stage

## Standard Drive Clutch

Clutch Type ----- Foot Operated, Spring Loaded,  
Single Disc Type.  
Size ----- 11 Inch  
Throwout Bearing ----- Ball Thrust w/grease fitting

## Transmission

Standard (Std. Clutch Only) ----- 4 Speed  
Case-O-Matic Dual Range (570 Only) ----- 8 Speed  
Dual Range Shuttle ----- 8 Speed Forward & Reverse

## Power Take-Off

Rotation ----- Clockwise (from rear of tractor)  
Output Shaft ----- Standard 1-3/8" ASAE Spline  
Speed ----- 540 RPM at 1750 Engine RPM

## Belt Pulley

Method of Engagement ----- PTO Control Lever  
Pulley Diameter ----- 10.25 Inches  
Pulley Face Width ----- 6.5 Inches  
Ratio Engine RPM to Belt Pulley RPM  
Standard PTO ----- 1.58 to 1  
Independent PTO ----- 1.53 to 1  
1 RPM of Belt Pulley ----- 2.68 Feet Per Minute Belt Travel

## Drawbar

Type ----- Full Swinging  
Drawbar Pin Hole Size ----- Will Accommodate 1.125 Inch Pin

**Buy Now**



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