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## 1570 TRACTOR

### SPIRIT OF '76 TRACTOR

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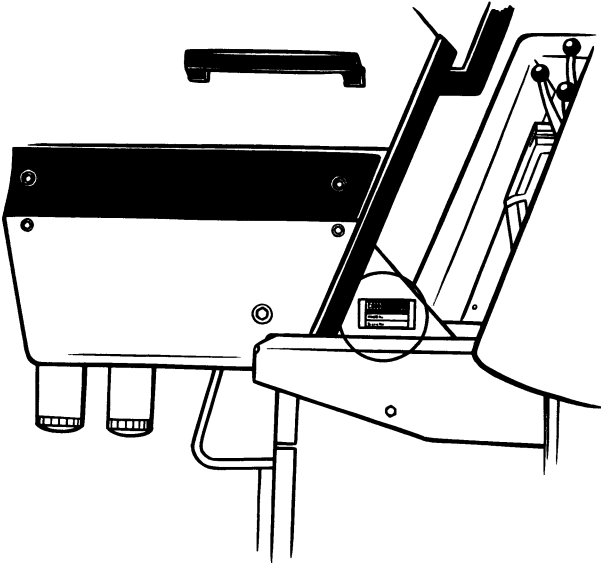
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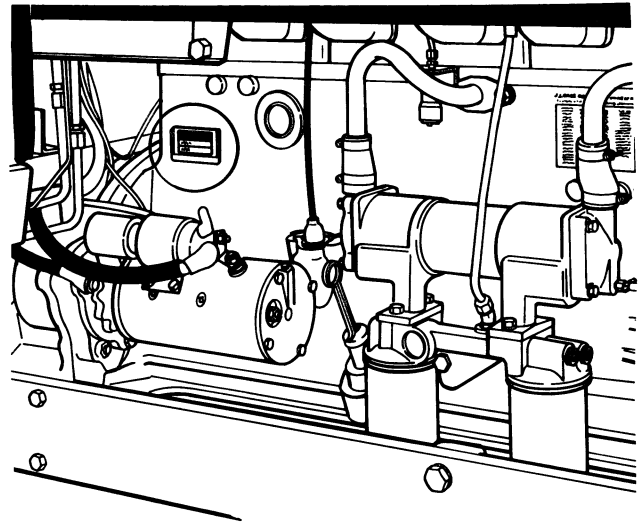
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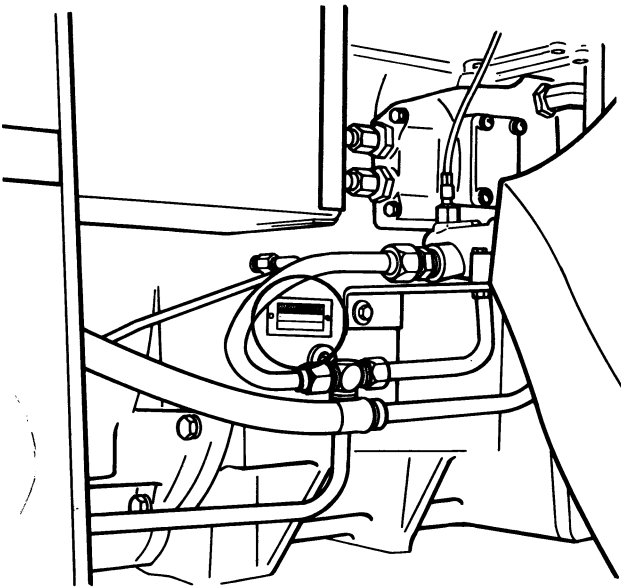
## SERIAL NUMBERS



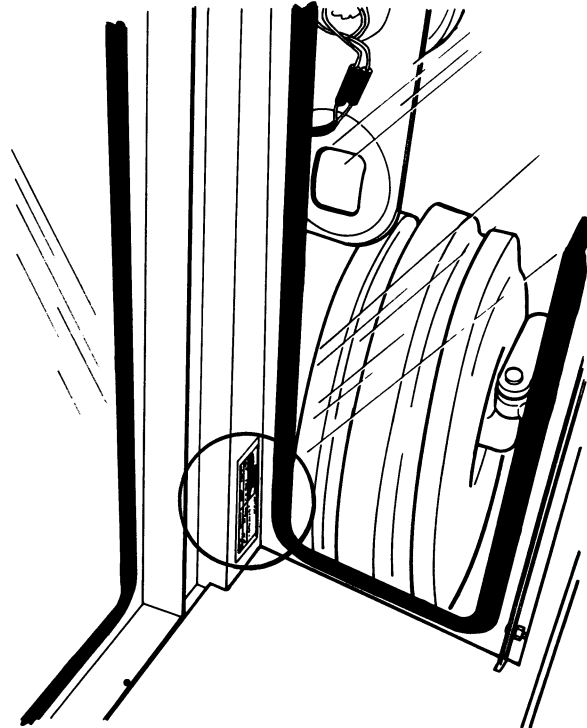
**TRACTOR SERIAL NUMBER**



**ENGINE SERIAL NUMBER**



**TRANSMISSION SERIAL NUMBER**



**CAB SERIAL NUMBER**

## DIESEL ENGINE

### General

Type .....	6 Cylinder, 4 Stroke Cycle, Valve-In-Head Turbocharged Diesel Engine
Firing Order .....	1-5-3-6-2-4
Bore .....	4-5/8 Inches (117.5mm)
Stroke .....	5 Inches (127mm)
Piston Displacement .....	504 Cubic Inches (8 259cm <sup>3</sup> )
Compression Ratio .....	15.8 to 1
Cylinder Sleeves .....	Removable Wet Type
No Load Governed Speed .....	2290-2330 RPM
Rated Engine Speed .....	2100 RPM
Engine Idling Speed .....	700-750 RPM
*Valve Tappet Clearance (Exhaust) .....	(Hot) .020 Inch (0.508mm) (Cold) .025 Inch (0.635mm)
(Intake) .....	(Hot and Cold) .015 Inch (0.381mm)

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

### Piston and Connecting Rods

Rings per Piston .....	3
Number of Compression Rings .....	2
Number of Oil Rings .....	1
Type Pins .....	Full Floating Type
Type Bearings .....	Replaceable Precision, Steel Back with Aluminum or Copper-Lead Alloy Liners.

### Main Bearings

Number of Bearings .....	7
Type Bearings .....	Replaceable Precision, Steel Back with Aluminum or Copper-Lead Alloy Liners.

### Air Intake System

Type .....	Self-Cleaning Air Induction System, Dry-Type, 2 Stage With Service Indicator and Pre-Cleaner.
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## Engine Lubrication System

Oil Pressure -----	45 to 60 PSI (310 to 414 kPa) with Engine Warm and Operating at Rated Engine Speed.
Type System -----	Pressure and Spray Circulation with Piston Oil Cooling.
Oil Pump -----	Gear Type
Oil Filter (2) -----	Full Flow Spin on Type, Pleated with By-pass Valve in Filter Base.
Oil Capacity -----	With Filters, 26 U.S. Qts. (24.6 litres) Without Filters, 22 U.S. Qts. (20.8 litres)
Oil Cooler -----	Engine Oil

## Cooling System

Capacity of System -----	44 U.S. Quarts (41.6 litres)
Type of System -----	Pressurized, Thermostat Controlled By-Pass Type; Forced Circulation, (Impeller Type Pump).
Radiator -----	Heavy Duty Fin and Tube Type
Thermostat (2) -----	Starts to Open at Approximately 175°F. (79°C.), Fully Open at 202°F. (94°C.)
Pressure Cap Required -----	10 PSI (69.0 kPa)

## Fuel System

Fuel Injection Pump -----	Robert Bosch, Type PES (Multiple Plunger).
Pump Timing -----	25 Degrees Before Top Dead Center (Port Closing). <b>IMPORTANT:</b> Do Not Advance Beyond 25° BTDC Under Any Circumstances. The Specified 25° Provides Minimum Emissions In Tractor Operation.
Fuel Injectors -----	American Bosch, 17mm Opening Pressure 4000 PSI (27 579 kPa)
Fuel Transfer Pump -----	Plunger Type, Integral Part of Injection Pump.
Governor -----	Variable Speed, Fly-Weight Centrifugal Type; Integral Parts of Injection Pump.
1st Stage fuel filter -----	Full Flow Spin on Type
2nd Stage fuel filter -----	Full Flow Spin on Type
Fuel Tank Water Trap and Drain -----	Located in Base of Fuel Tank.
Fuel Tank Capacity -----	80 U.S. Gallons (303 litres)
Fuel Level Gauge -----	Electric, Located on Instrument Panel.
Hand Primer Pump -----	Located on Top of the Fuel Transfer Pump.
Preliminary Fuel Filter -----	Located at the Bottom of the Fuel Transfer Pump.

## TRACTOR SPECIFICATIONS

### Electrical System

Type of System .....	12 Volt Negative Ground
Batteries .....	(2) 12 Volt Batteries Connected in parallel, Group Size 30H, Rated in 1.255 to 1.265 Specific Gravity. Discharge Rate 300 Amps at 0°F. Voltage Drops to 9.2 after 10 Sec- onds. Voltage Drops 1.0 Volt per Cell after 4 min.
Alternator .....	12 Volt 55 Amp Output, Negative Ground
Voltage Regulator .....	12 Volt, Solid State, Internal Component of Alternator
Starter Motor .....	12 Volt with Solenoid Switch
Head Lights (2) .....	12 Volt, 40/40 Watt Sealed High-Low Beam
Front Flood Lights (2) (optional) .....	12 Volt, 35 Watt Sealed Beam
R. Rear Flood Light (1) (optional) .....	12 Volt, 60 Watt, Sealed Beam
Flasher Lights (2) With Directional Turn Signals .....	12 Volt, Amber Lens
L. Rear Flood and Tail Light (1) .....	12 Volt, 60 Watt Sealed Beam Combination Tail and Flood Lamp.
Circuit Breaker System Over Load Check .....	12 Volt Twin 40 AMP Breakers Connected in Parallel, 80 Amp Rating. 60 Amp. Min. Continuous Capacity.
Lights Circuit Breaker .....	40 Amp., Located on Light Switch

### Hydraulic Power Assist Brakes

Type .....	Hydraulic, Power Assisted, Self-Adjusting Multiple Plate Wet Type Differential Brakes.
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### Power Shift Transmission

Type .....	3 Speed Compound Planetary With Hydraulically Actuated Clutches and a 4 Speed Gear Range Selection.
Gear Selection .....	12 Speeds Forward and 3 Speeds Reverse.
Shifting .....	Hydraulic Power Shifting Controlled by a Lever on Operator's Console. 4 Speed Range Controlled by a Mechanical Shifter from a Lever on Operator's Console.
Oil Cooler .....	Transmission, Hydraulic, Steering and Brake Oil



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### Differential Lock

Type ----- Hydraulically Actuated, Operated  
by Operator's Foot Pedal.

### Hydrostatic Power Steering

Dual Pump, 8 gal. (30.3 litres) Section ----- Direct Drive Gear Type

Pump Capacity at 2000 Engine RPM ----- 8 GPM (30.3 l/min.)

HGA Hydrostatic Type ----- Integral and Bi-Directional  
Gerotor Metering Section, Actuated  
by the Steering Wheel.

Steering Cylinders ----- Two Double Acting Cylinders

### Draft-O-Matic System

Type of Sensing ----- Lower Link

Type Control ----- Hand Lever

Type Valve ----- 3 Positions - Raise - Hold - Lower

Type Draft Arms ----- Rigid Swinging, with  
Manual Float Adjustment

Type Hitch ----- 3 Point Category III

Convertible Hitch Coupler (Available) ----- Category III-II

### Power Take-Off

Type Clutch ----- Hydraulically Operated

Rotation ----- Clockwise

Spline Size ----- 21 Splines 1-3/8 in. (34.9mm) Dia.

Engine Speed 2100 RPM ----- 1000 RPM Shaft Speed

### Drawbar

Standard or Yoke Type ----- Full Swinging Roller Mounted,  
Will Accommodate a 1-1/2 Inch (38.1mm) Dia. Pin.

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