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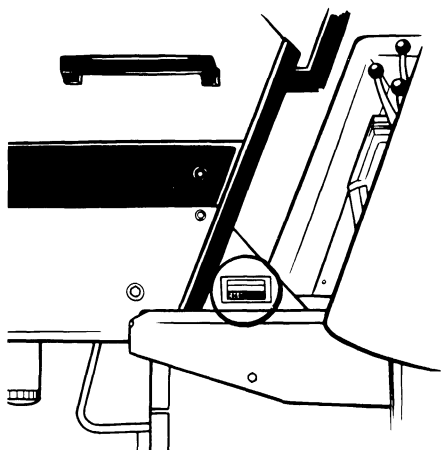
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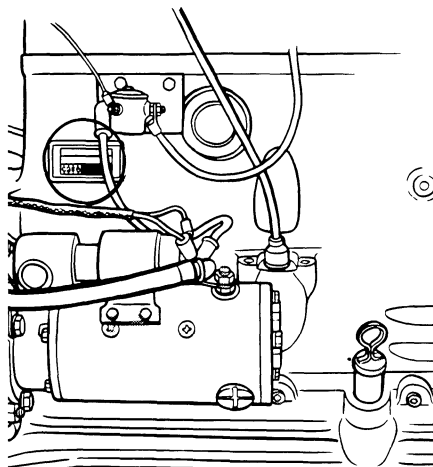
Section 1010

GENERAL SPECIFICATIONS 970 TRACTOR

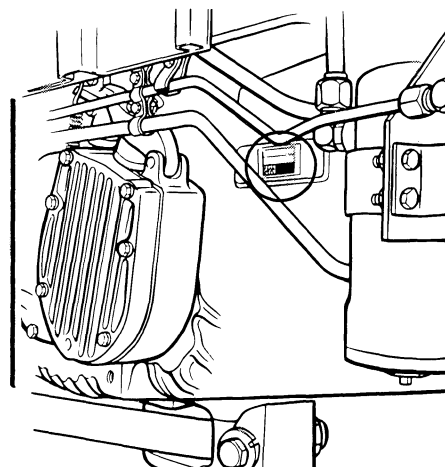
SERIAL NUMBERS



TRACTOR MODEL AND
SERIAL NUMBER



ENGINE SERIAL NUMBER



TRANSMISSION SERIAL NUMBER

DIESEL ENGINE

General

(Prior to Tractor SN 8675001)

Type ----- 6 Cylinder, 4 Stroke Cycle, Valve-in-Head

Firing Order ----- 1-5-3-6-2-4

Bore ----- 4-1/8 Inches (104.7mm)

Stroke ----- 5 Inches (127mm)

Piston Displacement ----- 401 Cubic Inches (6 571.2cm³)

Compression Ratio ----- 16.5 to 1

Cylinder Sleeves ----- Removable Wet Type

No Load Governed Speed ----- 2040 RPM

Rated Engine Speed ----- 1900 RPM

Engine Idling Speed ----- 725 RPM

*Valve Tappet Clearance (Exhaust)	(Hot)	.020 Inches (0.508mm)
		(Cold)	.025 Inches (0.635mm)
(Intake)	(Hot and Cold)	.015 Inches (0.381mm)

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

(Starting w/Tractor SN 8675001)

Type ----- 6 Cylinder, 4 Stroke Cycle,
Valve-in-Head.

Firing Order ----- 1-5-3-6-2-4

Bore ----- 4-1/8 Inches (104.7mm)

Stroke ----- 5 Inches (127mm)

Fuel System (Continued)

Fuel Injectors ----- Pencil Type

Opening Pressure:

Prior to Engine SN2504029 ----- 2800 PSI (19 305 kPa)

Starting with Engine SN2504029 ----- 3200 PSI (22 063 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 ----- 50 U.S. Gallons (189.3 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.

Fuel Tank Filter ----- Located in Fuel Shut-off Valve in Base of Fuel Tank.

SPARK IGNITION ENGINES

General

(Prior to Tractor SN 8675001)

Type ----- 6 Cylinder, 4 Stroke Cycle, Valve-in-Head

Firing Order ----- 1-5-3-6-2-4

Bore ----- 4 Inches (101.6mm)

Stroke ----- 5 Inches (127mm)

Compression Ratio ----- 7.5 to 1

Piston Displacement ----- 377 Cubic Inches (6 178cm³)

No Load Governed Speed ----- 2040 RPM

Rated Engine Speed ----- 1900 RPM

Engine Idling Speed ----- 600 RPM

*Valve Tappet Clearance (Intake) ----- (Hot and Cold) .015 Inches (0.381mm)

(Exhaust) ----- (Hot) .020 Inches (0.508mm)

(Cold) .025 Inches (0.635mm)

Exhaust Valve Rotators ----- Positive Type

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

Distributor Ignition

Engine Timing

GENERAL SPECIFICATIONS

Cooling System

Electrical System

Type of System	-----	12 Volt Negative Ground
Batteries	-----	(2) 12 Volt Batteries Connected in parallel.
	(Spark Ignition) -	Group Size 27H, Rated at 1.255 to 1.265 Specific Gravity, Discharge Rate 300 Amps at 0°F., Voltage drops to 8.7 after 10 seconds, Voltage drops to 1.0 volts per cell after 3-1/2 minutes.

Power Shift Transmission

Type ----- 3 Speed Compound Planetary With Hydraulically Actuated Clutches and a 4 Speed Gear Range Section.

Gear Selection ----- 12 Speeds Forward and 3 Speeds Reverse

Shifting ----- Hydraulic Power Shifting Controlled By a Lever on Operators Console. 4 Speed Range Controlled By a Mechanical Shifter From a Lever On Operator's Console.

Power Take-Off

Type Clutch ----- Hydraulically Operated

Rotation ----- Clockwise

Spline Size ----- 540 RPM ----- 6 Splines ----- 1-3/8 in. (34.9mm)
1000 RPM ----- 21 Splines ----- 1-3/8 in. (34.9mm)

Engine Speed 2000 RPM ----- 540 or 1000 RPM Shaft Speed

Belt Pulley

Method of Engagement ----- PTO Control Lever

Pulley Diameter ----- 10.5 in. (266.7mm)

Pulley Face Width ----- 7.25 in. (184.2mm)

Ratio Engine RPM:

(540 PTO) ----- 1.716 to 1

(1000 PTO) ----- 1.722 to 1

1 RPM of Belt Pulley ----- 2.75 feet (8.4m) Per Minute Belt Travel.

Draft-O-Matic System

Type of Sensing ----- Lower Link

Type Control ----- Hand Lever

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

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

Type Hitch ----- 3 Point Category II

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

Hydrostatic Power Steering

Pump Type ----- Large Volume, Spur Gear, Continuous Running.

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

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

Actuating Cylinders ----- 2 Way Cylinders Are Integral Part of Steering Gear Mechanism.

Drawbar

Standard or Yoke Type ----- Full Swing Roller Mounted. Will
Accommodate a 1-1/4 Inch (31.8mm) Dia. Pin

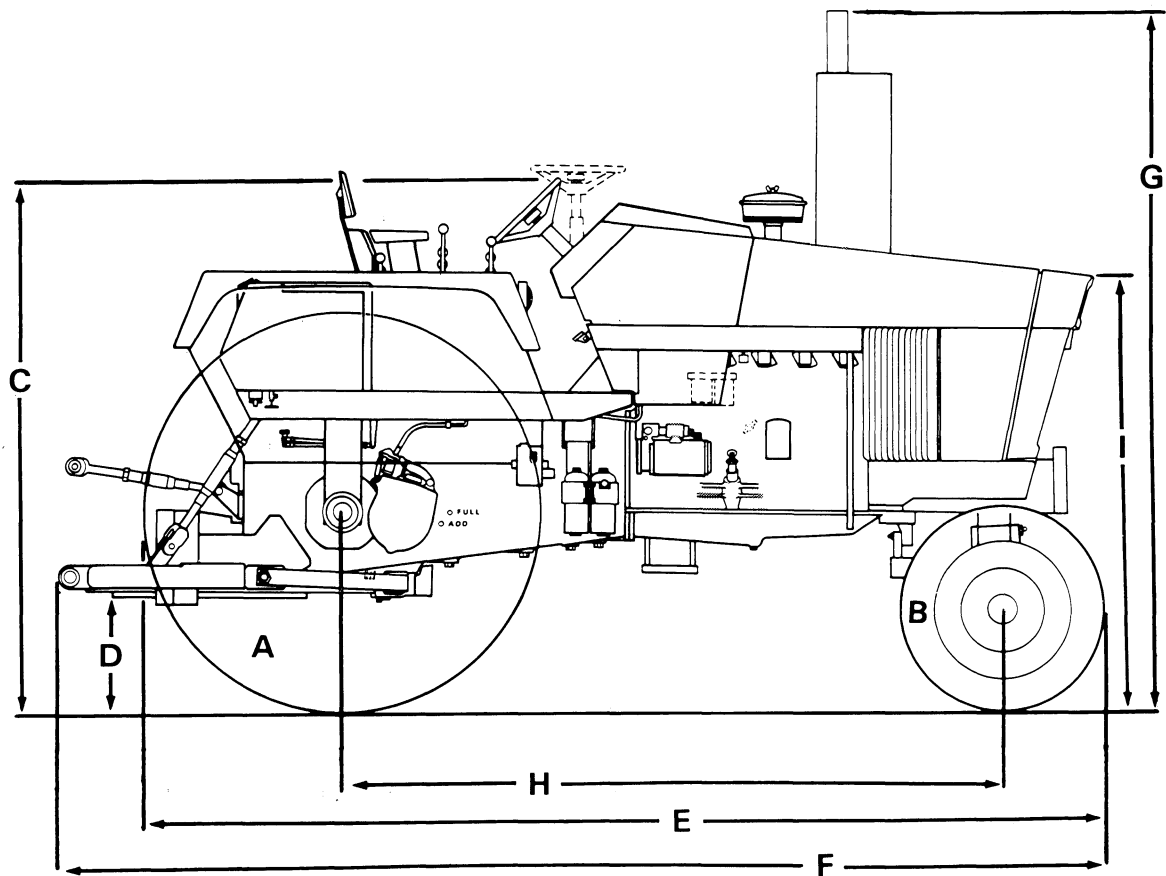
Remote Hydraulic System

Pump ----- Large Volume, Spur Gear, Continuous Running.
Type Valve ----- Dual Valve - Individual Hand Lever Control
Portable Cylinder Coupling ----- ASAE R366 Standard Quick
Detachable Break-Away Type
Pump Capacity at 2000 Engine RPM ----- 16 GPM (60.6 l/mn)
Relief Valve Pressure ----- 1700 to 1900 PSI (11 721 to 13 100 kPa)
Portable Cylinders ----- Case Cylinders Available

OPERATOR’S CAB

The Case Operator’s Cab is equipped with Built-in Rollover Protection as specified in ASAE Standard S336.1, SAE Standards J168a, and OSHA Regulations 1928.53 and 1926.1002, Approval Number CA R317.

APPROXIMATE OVERALL MEASUREMENTS



A	18.4-34R1
B	10.00-16F2
C	85 in. (2 159mm)
D	15 in. (381mm)
E	157 in. (3 988mm)

F	172 in. (4 369mm)
G	110 in. (2 794mm)
H	109 in. (2 769mm)
I	70 in. (1 778mm)

Height Over Cab 113 Inches (2 870mm)



APPROXIMATE WEIGHT

970 Tractor Without Cab 9095 Pounds (4 125 kg.)
970 Tractor With Cab 9935 Pounds (4 506 kg.)



IMPORTANT: The Total Tractor Weight with ballast and weights must not exceed 12,200 lbs. (5 534 kg.).

TIRE AND WHEEL EQUIPMENT

Front

TIRE SIZE	TIRE PLY	RIM SIZE	TREAD TYPE	DUAL	ADJ.	TIRE PRESSURE
10.00-16	6	W8L-16	F2		X	28 PSI (198 kPa)
11.00-16	6	W8L-16	F2		X	36 PSI (248 kPa)

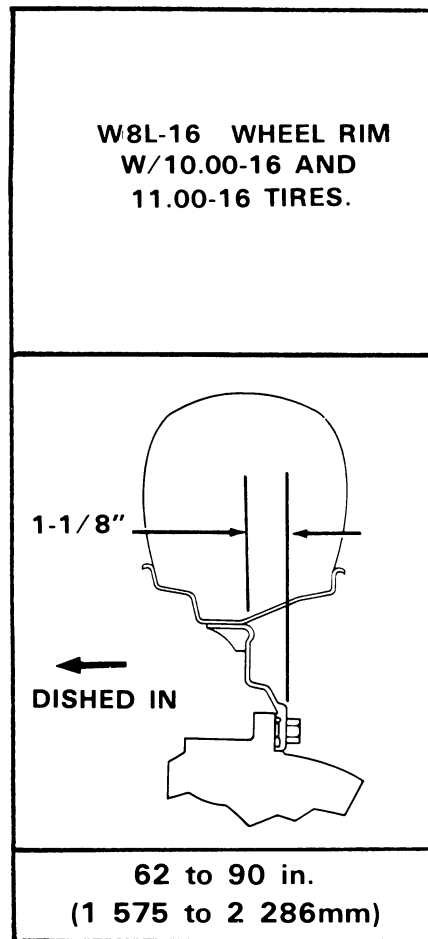
Rear

TIRE SIZE	TIRE PLY	RIM SIZE	TREAD TYPE	DUAL	ADJ.	TIRE PRESSURE
16.9-38	8	W14-38	R1		X	24 PSI (166 kPa)
18.4-34	6	W16L-34	R1 & R2	X	X	16 PSI (110 kPa)
18.4-38	6	W16L-38	R1 & R2	X	X	16 PSI (110 kPa)
18.4-38	8	W16L-38	R1	X	X	20 PSI (138 kPa)
20.8-34	6	W18L-34	R1	X	X	16 PSI (110 kPa)
20.8-34	8	W18L-34	R1	X	X	18 PSI (124 kPa)
23.1-30	8	DW20-30	R1 & R2		X	16 PSI (110 kPa)

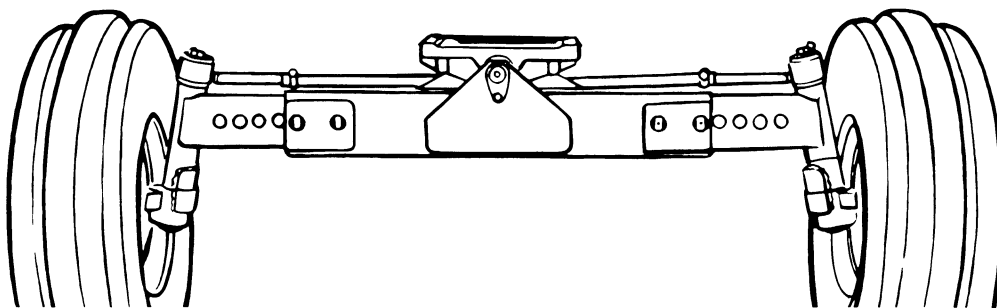
NOTE: Keep tires inflated to recommended pressures. Check pressures at least every 50 hours of operation or once a week, whichever occurs first. DO NOT reduce rear tire pressure to increase traction. When plowing, increase furrow wheel tire pressure 4 PSI (27.6 kPa).

IMPORTANT: Do not attempt to remove, repair or install a tractor tire on a rim. Take the tire and rim to an experienced and properly equipped tire shop where special safety equipment is available.

FRONT WHEEL TREAD SPACING (With Wheels Dished In Only)

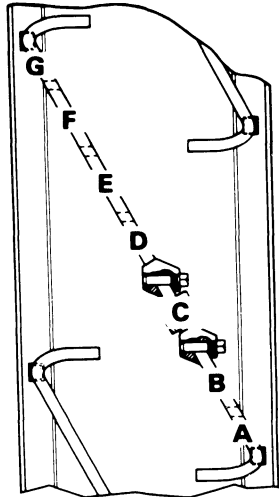
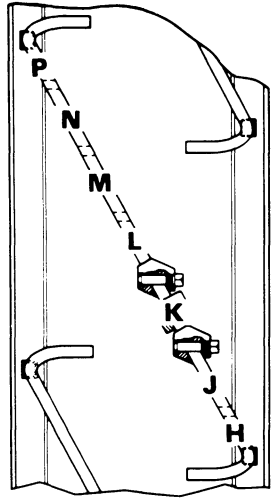


WIDE ADJ. AXLE SPACING (1 TO 8 SETTINGS)



NOTE: Axle spacings listed above are from the narrow setting, in increments of 4 in. (101.6 mm) to the wide setting. When tightening the front wheel bolts, torque 5/8 in. dia. bolts 115 to 130 ft. lbs. (156 to 176 Nm) and 9/16 in. dia. bolts 85 to 100 ft. lbs. (115 to 136 Nm).

POWER SHIFT REAR WHEEL TREAD SPACING

		86 INCH (2 184mm) REAR AXLE	96 INCH (2 438mm) REAR AXLE	118 INCH (2 997mm) REAR AXLE
 <p>HUB OR WHEEL MOVED IN ON AXLE</p>	A		64 INCH (1 626mm)	64 INCH (1 626mm)
	B	64 INCH (1 626mm)	68 INCH (1 727mm)	68 INCH (1 727mm)
	C	68 INCH (1 727mm)	72 INCH (1 829mm)	72 INCH (1 829mm)
	D	72 INCH (1 829mm)	76 INCH (1 930mm)	76 INCH (1 930mm)
	E	76 INCH (1 930mm)	80 INCH (2 032mm)	80 INCH (2 032mm)
	F	80 INCH (2 032mm)	84 INCH (2 134mm)	84 INCH (2 134mm)
	G	84 INCH (2 134mm)	88 INCH (2 235mm)	88 INCH (2 235mm)
 <p>HUB OR WHEEL MOVED OUT ON AXLE</p>	H	84 INCH (2 134mm)	96 INCH (2 438mm)	116 INCH (2 946mm)
	J	88 INCH (2 235mm)	100 INCH (2 540mm)	120 INCH (3 048mm)
	K	92 INCH (2 337mm)	104 INCH (2 642mm)	124 INCH (3 150mm)
	L	96 INCH (2 438mm)	108 INCH (2 743mm)	128 INCH (3 251mm)
	M	100 INCH (2 540mm)	112 INCH (2 845mm)	132 INCH (3 353mm)
	N	104 INCH (1 642mm)	116 INCH (2 946mm)	136 INCH (3 454mm)
	P	108 INCH (2 743mm)	120 INCH (3 048mm)	140 INCH (3 556mm)

NOTE: Each shifting position hole allows a 2 inch (50.8mm) individual wheel adjustment. Dimensions given in inches and millimeters.

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version of the service manual

