

bearings, and camshaft bearings pressure lubricated. Rocker arms, pressure lubricated (intermittent). Piston pin bearings, cylinder walls, and tappets splash lubricated. Timing drive, squirt lubricated. Push rods, lubricated by drip from rocker arms.

Oil filter—Full flow, 2 qt., with replaceable 300-hr. element, safety bypass valve. **Fuel pump**—Eccentric drive from timing idler gear. Positive supply of fuel to carburetor. **Automotive style carburetor**—Single venturi, updraft type. Accelerating well and economizer valve. Sediment bowl and 4 filter screens. **Air cleaner**—Dry cartridge type. Diameter, 6.5 in. Rated air flow, 100 cfm. **Air circulation**—4-blade, V-belt drive fan. **Cooling system**—Pump-circulated, thermostat-controlled, with fixed bypass. Full length water jackets for uniform cooling. Tube-and-fin radiator, with pressure cap. 28 gpm pump. Thermostat, opening temperature, 188 deg. F.; fully open, 212 deg. F. **Electrical starting and ignition**—Key starter switch and transmission safety lock. Starting motor with positive engagement drive assembly. Distributor has centrifugal and vacuum spark advance. **Battery**—12-volt, 80 amp. hr. Ventilated-type generator. Capacity, 22 amp. Voltage and current regulator.

DIESEL ENGINE

Type—In-line vertical, direct injection, with cold starting aid. No. of cylinders: 3. Rated governed speed: 2,200 rpm. Bore: 4.4 in. Stroke: 4.4 in. Displacement: 201 cu. in. Compression ratio: 16.5:1. **Crankshaft**—Induction hardened, forged alloy steel. **Pistons**—Aluminum alloy, fitted with hard, heat-resistant, Ni-Resist top ring groove. **Piston Rings**—One oil ring and three compression rings. **Piston travel**—1,613 fpm.

Injection pump — Distributor type with mechanical governor. **Injection nozzles** — 4 orifice type accessible without removing valve cover. **Injector timing**—19 deg. **Fuel filter**—Replaceable paper element. 1,200-hr. element life. **Air cleaner**—Dry type. Diameter, 6.5 in. Rated air flow, 100 cfm. **Battery**—128 amp. hr.

In general, all other specifications which would apply to a diesel engine are the same as for the gasoline engine.

CHASSIS

Differential lock—Improves effective traction in difficult going. Operator engages with pedal near right foot. Both drive wheels turn at equal speed, permitting wheel on firm ground to move the tractor. Spring-loaded coupling automatically unlocks differential when difficult spot is passed.

Double reduction final drive—First reduction, matched pinion gear and spiral bevel ring gear. Straddle-mounted, 4-pinion differential. Second reduction, planetary gear sets, mounted inboard. Semi-floating rear axle, with forged steel axle shafts. Heavy-duty rear axle housing, 9,000-lb. capacity.

Clutch—Heavy-duty, dry disc. Diameter: 13 in. Total lining area, one side, 81.2 sq. in. Foot-operated.

Brakes—Mechanical. Self-energizing wet discs, fully enclosed, mounted between differential and planetary reduction gears. Operated either individually or simultaneously. Size, 8 x 6.80 inches. Three discs, with six faces totaling 168 sq. in. for braking.

FRONT END—AXLE

Rated capacity, lb. 6,500
Maximum strength, lb. 26,000

Fixed tread, "U" boxed beam, industrial axle, fabricated of high tensile steel. Extra heavy cast iron axle support is bolted to heavy cast engine pan and block for extra strength. Heavy truck-type spindles. Inner and outer spindle bearings, spindle pin, and specially forged steering arms engineered for strength and durability. 2½-in. by 18-in. effective axle pivot length with generous bearing area. Pivot area extends through axle and solid bar radius rod.

Steering

Center point power assist, with cylinder located in front axle support casting. Steering wheel turns, stop to stop, 3.3. Engine mounted, gear-driven, gear type pump. Pump delivery, 3.5 gpm @ 1,000 rpm and 0 psi. Cylinder, 4.62 in. stroke, 2.75 in. diameter. Replaceable element filter, 600-hour element life.

TRAVEL SPEEDS, APPROX MPH AT 2,200 ENGINE RPM WITH AVERAGED SIZE REAR TIRES

Gear	Dual Range 8-Speed	Manual Reversing 6x4	Power Shift 10-Speed
1	1.3	2.2	1.0
2	1.6	3.7	1.3
3	2.8	5.1	1.4
4	3.9	7.6	2.0
5	4.6	13.2	3.2
6	5.8	18.0	4.1
7	10.2	—	4.7
8	13.8	—	6.1
9	—	—	9.9
10	—	—	15.5
1 Rev.	1.9	2.5	2.8
2 Rev.	6.6	4.5	4.2
3 Rev.	—	8.9	—
4 Rev.	—	16.1	—

POWER TAKE-OFF OPTIONS

	No PTO	Transmission PTO	Independent PTO
8-speed	X	X	X
10-speed	X		X
Manual reversing 6x4	X	X	X