



MODEL 4894 Tractor

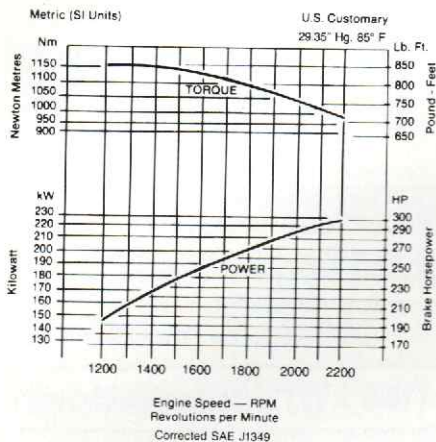
300 (223 kW) gross engine horsepower

290 D.I.N. ps (213 kW)

225 (168 kW) d/b horsepower



BASIC TRACTOR



ENGINE

Engine Full Load Performance

Maximum horsepower measured at 2200 RPM

S.A.E. gross engine 300 (223 kW)

D.I.N. ps 290 (213 kW)

PTO 253 (188 kW)

Type: 6 cylinder, in line, 4 cycle, valve in head, direct injection turbocharged diesel engine.

Displacement: 674 in³ (11 L)

Fuel No. 2 diesel

Governed speed range . . . 750-2420 rpm

Working speed range 1400-2200 rpm

Rated engine speed 2200 rpm

Max torque. 845 ft/lbs @ 1400 rpm
(1 145 N-m)

Bore and stroke 5.0 x 5.71 in.
(127 x 145 mm)

Compression ratio 14.7:1

Cylinder sleeves. Wet removable type induction hardened.

Crankshaft: counterbalanced, dynamically balanced, hardened.

Number of main bearings. 7

Lubrication System

Type: (pressure sensing); constant oil pressure and spray lubrication w/drilled rods and separate nozzles for piston cooling.

Engine oil heat exchanger.

Fuel System

Fuel injection pump: in-line, multiple plunger type w/hand primer pump assembly.

Size of injectors 21 mm

Note: manual fuel shutoff controlled by engine stop cable.

Fuel Filtering System

Welded trap and water drain on bottom of each fuel tank.

Preliminary fuel filter located at bottom of fuel transfer pump.

1st stage fuel filter: full flow spin-on.

2nd stage fuel filter: full flow spin-on.

Cooling System

Type: pressurized, dual thermostat controlled (79° C)

Radiator relief pressure: 10 psi (69 kPa).

Bypass type: forced circulation (impeller centrifugal pump).

Radiator: heavy duty fin and tube deaerating type.

Capacity: 44 qts (41.6 L)

ENGINE OIL HEAT EXCHANGER

Type: oil to water. Location: LH side of engine. Transmission and hydraulic oil cooler (oil to air type). Location: front of radiator.

Oil cleaner, centrifugal type, continuous working, cyclonic separation.

Air Cleaner — High Capacity

Self-cleaning air induction system. Stratotube with final and safety dry type elements; service indicator on light instrument panel, muffler aspirated.

Muffler High Capacity (thin line)

Upright muffler and curved exhaust extension with aspirator.

ELECTRICAL SYSTEM

Type of system: 12 volt negative ground. Alternator: 12 volt, 105 amp output, negative ground.

Batteries: (2) 12 volt, 95 amp hrs, heavy duty.

Lighting Equipment and Identification Marking

Headlights (halogen) 2

Front cab lights (halogen). 2

Rear cab lights (halogen) 2

Tail lights 2

Flasher lights, one RH, one LH, w/directional signals. 2

Slow Moving Vehicle Sign. 1

Optional front field lights (halogen)

cab mounted. 2

Optional rear flood lights (halogen)

cab mounted. 4

CAPACITIES

Fuel tanks, one on each side of frame total 150 gals (568 L)

Engine oil capacity 28.4 qts w/filters (26.9 L)

Transmission and hydraulic system w/PTO. 44 qts (41.7 L)

without PTO 40 qts (37.9 L)

Differentials (each) 21 qts (19.9 L)

Planetaries (each). 9.5 qts (9.0 L)

TRANSMISSION

Standard Range Power Shift Transmission

Ground speed selections 12 forward and 4 reverse speeds.

Type: 3-speed compound planetary with hydraulically actuated wet multiple disc clutches and 4 speed range selection.

Neutral transmission safety starting switch: located in 4 speed transmission.

Power Shift Selection

3-speed electrically activated hydraulic power shift controlled by a lever on the steering wheel console, can be shifted w/tractor on-the-go.

Transmission Range Selection

4-speed gears controlled by lever on steering wheel console. Tractor must be stopped and inching pedal depressed to shift to any of the 4 gears.

Type of Clutch

Multiple wet disc. Inching pedal operation: suspended pedal.

Transmission Oil Level Gauge

2 transparent globes (visible from left side of transmission).

**APPROXIMATE TRAVEL SPEEDS
IN MPH** (KM/H) AT 2200 RPM**

Transmission Range	Power Shift		
	1	2	3 and Reverse
1	2.0 mph (3.2 km/h)	2.7 mph (4.4 km/h)	3.4 mph (5.5 km/h)
2	3.1 mph (5.0 km/h)	4.1 mph (6.6 km/h)	5.1 mph (8.2 km/h)
3	4.3 mph (6.9 km/h)	5.8 mph (9.3 km/h)	7.2 mph (11.6 km/h)
4	9.5 mph (15.3 km/h)	12.7 mph (20.5 km/h)	17.4 mph (28.0 km/h)

**Tire pressure: 16 psi (110 kPa) no slip condition with 23.1 x 30 (R1) tire equipment. Travel speeds calculated at governed speeds.

BRAKES

Type: hand parking, mechanically actuated by adjustable brake handle on the operator's platform (audible & visual warning).
Type: foot service, self-adjusting, internal multiple dry disc, hydraulically actuated.
Location: main drive line, enclosed in rear of transmission.
Operation: right foot, suspended pedal.

AXLES

Final drive (integral with wheels): 3 pinion planetary located in wheel hub.
Planetary reduction 6:1
Differential type: torque bias differential (transfers wheel slippage to opposite wheels to increase traction).
Differential reduction 4.88:1
Total axle reduction 29.25:1

**CASE INTERNATIONAL 4 WAY
SELECTIVE STEERING**

Two independent hydraulic steering systems; front and rear can be operated independently or can be operated in com-

bination through a solid state electro hydraulic system. This offers methods of steering:

1. Front wheel steering selection — controlled by the steering wheel.
2. Rear wheel steering selection (rear wheels only), controlled by a rocker switch.
3. Automatic coordinated steering selection (front and rear wheels controlled by steering wheel). Rear wheels are steered automatically by steering wheel when the steering mode switch is placed in 4 wheel control position.
4. Crab steering selection. Front and rear wheels steer the tractor diagonally in a straight line ahead. Front wheels are controlled by steering wheel, and rear wheels by the rocker switch.
Steering radius w/18.4 x 34 tires @ 74" (1.89 m) tread width:
Front wheel steer radius .. 317" (805 cm)
Automatic coordinated (front and rear wheel steer) 188" (478 cm)

**CASE INTERNATIONAL
CONTROL HYDRAULICS**

Type of system: Closed center, pressure and flow compensating system.

Charging Pump for Hydraulic System:
Delivers filtered oil under pressure through two filters to main and steering pumps.
Capacity 47 gpm @ 40 psi
(178 L/min @ 276 kPa)

Main Hydraulic Pump

Variable displacement axial piston pump: pressure sensing and flow compensating; delivers filtered oil to remote, hitch, power shift and rear steering systems.
Rated pump pressure 2250 psi (15 513 kPa)
Rated volume 31 gpm (117 L/min)

REMOTE HYDRAULICS

Remote Hydraulic Cylinder and Hydrostatic Control

Operation: double acting, single acting, or float.
Type of control valves: closed center (pressure/flow compensating).
Flow control, variable adjust control on remote valves w/4 in cab standard.
Number of remote circuits — 4 standard. Optional 3rd remote circuit w/loadcheck feature available.
Variable range of flow at remote circuits 24/3.5 gpm (91/13 L/min)
Adjustable kick-out pressure range control 2000/1200 psi (13 790/8 270 kPa)
Optional remote double acting cylinder, pressure released, 4" (102 mm) by 8" (203 mm) stroke.
Hydraulic cylinder hose length, 150" (3.81 m) w/quick detachable type ASAE/ISO standardized swivel and shroud covered male hydraulic couplers (couple under pressure).

3-POINT HITCH (OPTIONAL)

Type: Category III w/quick coupler.
Type draft control: electronic with sensitivity and draft adjustment.
Type hitch control valve: raise, hold, lower and float positions. Allows 3 point hitch mounted implements w/wo gauge wheels to follow ground contours w/o operator's attention to maintain constant implement depth.
Type draft arms: swinging, w/fixd or float adjustment on lift links.
Number of lift cylinders 2
Max pressure to rockshaft 2250 psi (15 513 kPa)
Lifting capacity of 3 point hitch w/quick coupler @ 24" (610 mm) load centers at rear of hitch points 12,750 lbs (5 783 kg)
Linkage lifting range 8 to 40" (203 to 1.02 m)

BASIC TRACTOR

POWER STEERING HYDRAULIC SYSTEM

Filtered oil supplied to open center gear pump for front wheel hydrostatic steering.

Steering pump capacity 17.85 in³/rev
(292 cm³/rev)

Rated pressure ... 2250 psi (15 513 kPa)

Rear wheel steering oil is supplied by the main hydraulic axial piston pump.

Steering cylinders, front wheels 2

Steering cylinders, rear wheels 2

Steering cylinder diameter,
front 2.5" (63.5 mm)

Steering cylinder diameter,
rear 3" (76 mm)

POWER TAKEOFF (Independent)

Power takeoff w/shield.

Performance: PTO horsepower at 2200 engine rpm 253 PTO hp (188 kW)

Type: hydraulically actuated wet multiple disc clutch, controlled by console lever.

PTO brake, power off. Independent.

Sound suppressed drop box with helical gear train.

Rotation (from the rear): clockwise.

Spline size diameter

(20 splines) 1.75" (44.5 mm)

DRAWBAR

Extendable, 3-position 20, 24 and 28" (508, 610 and 711 mm) wide-swinging, yoke type, will accommodate 1.5" (38.1 mm) diameter pin for implement hitch.

WHEEL EQUIPMENT

Optional tires (subject to availability, factory installed):

23.1 x 30, 8PR (R1) & (R2)

24.5 x 32, 10PR (R1) & (R2)

24.5R x 32, 1 Star (R1)

30.5 x 32, 10PR (R1) & (R2)

30.5R x 32, 1 Star (R1)

*18.4 x 34, 8PR (R1) & (R2)

*20.8 x 34, 8PR (R1) & (R2)

*20.8R x 34, 1 Star (R1)

23.1 x 34, 8PR (R1) & (R2)

*18.4 x 38, 8PR (R1) & (R2)

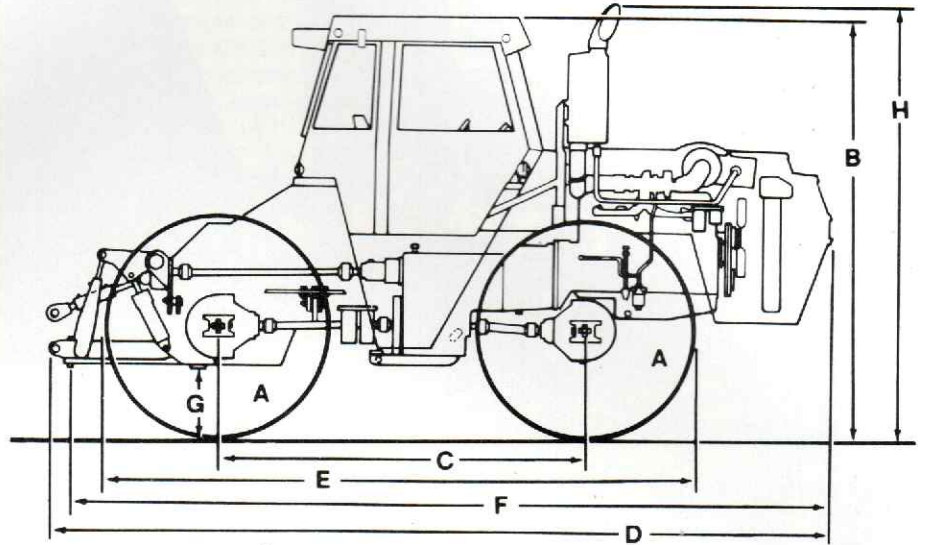
*18.4R x 38, 1 Star (R1)

*20.8 x 38, 8PR (R1) & (R2)

*20.8R x 38, 1 Star (R1)

Outside dual wheels available for most inner tire sizes in R1, R2 tread at 121 to 142" (3.07 to 3.6 m) tread width.

*Duals recommended



ADJUSTABLE WHEEL TREAD WIDTHS (SINGLE WHEELS)

Wheel tread adjustments in increments: 2" (50.8 mm), double wheel clamps.

Tires Sizes

18.4 x 38 (R1) & (R2)

20.8 x 38 (R1) & (R2)

18.4 x 34 (R1) & (R2)

20.8 x 34 (R1) & (R2)

23.1 x 30 (R1) & (R2)

24.5 x 32 (R1)

30.5 x 32 (R1)

Approx. Tread Widths

78 to 94"

(1.98 to 2.39 m)

82 to 94"

(2.08 to 2.39 m)

74 to 94"

(1.88 to 2.39 m)

78 to 94"

(1.98 to 2.39 m)

86 to 94"

(2.18 to 2.39 m)

82" fixed tread

(2.08 m)

88" fixed tread

(2.24 m)

DIMENSIONS

A Tire: 23.1 x 30 (R1)

B 125" (3.18 m)

C 110" (2.79 m)

D 237" (6.02 m)

E 175" (4.45 m)

F 228" (5.79 m)

G 18" (457 mm)

H 131" (3.33 m)

Overall width (min) 99" (2.52 m)

Overall length

(w/hitch coupler) 243" (6.17 m)

Rear axle oscillation 30°

Front and rear axle

clearance 19" (488 mm)

Drawbar clearance 18" (457 mm)

AVERAGE SHIPPING WEIGHT

Includes cab, hitch, 30.5 x 32" single

wheels 21,250 lbs (9 639 kg)

Drawbar tractor 19,950 lbs (8 886 kg)

Maximum operating weight, ROPS, tractor

w/cab and normal field operating equip-

ment: weight/ballast. Dealer installation.

..... 28,500 lbs (12 927 kg)

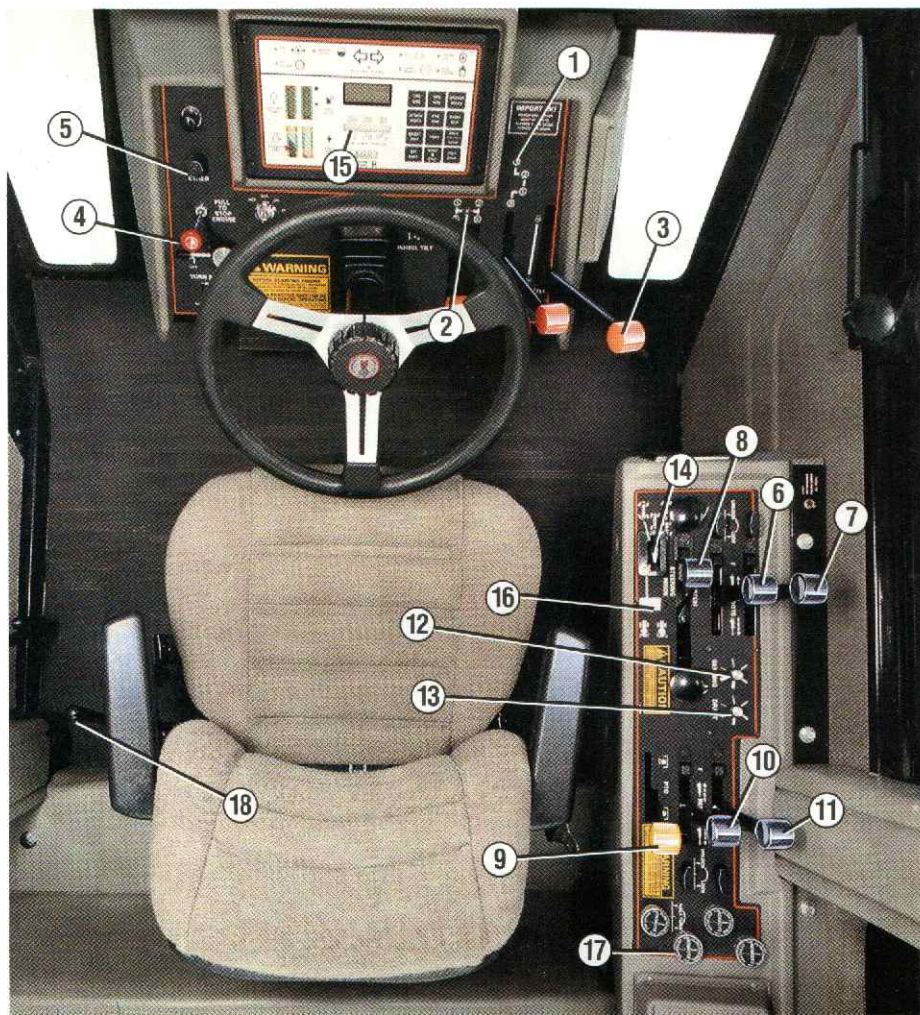
Weights added as required. Recommend

tractor be weighted, statically 65% of the

tractor weight on front end, 35% on rear

wheels — for optimum performance.

BASIC TRACTOR



OPERATIONAL ITEMS

1. Power shift
2. Range transmission
3. Engine throttle
4. Engine shut-off
5. Ether start assist
6. Remote hydraulic circuit No. 1
7. Remote hydraulic circuit No. 2
8. 3-point hitch lever
9. PTO control lever
10. Remote hydraulic circuit No. 3
11. Remote hydraulic circuit No. 4
12. Electronic draft control sensitivity adjustment
13. Electronic draft control draft adjustment
14. 4-way steering selector
15. Rear wheel position indicator in digital display
16. Rocker switch for rear wheel positioning
17. Flow control knobs (4 standard)
18. Hand parking brake

INTELLIGENCE CENTER

Digital instrument cluster with English or Metric readout displaying engine, or PTO or ground speed and electric tach/hourmeter. Bar graph display of fuel level, coolant temperature, exhaust temperature and voltage.

Monitoring system provides lights and audible warning for critical functions; engine oil pressure and coolant temperature, transmission oil pressure and temperature, hydraulic/transmission filter pressure and air filter indicator. Light for alternator. Green light to signify all "systems normal."

Functions are elapsed time, acres covered per hour, cumulative acreage count and rear wheel position indicator.

OPERATOR'S ENVIRONMENT

Case International "Silent Guardian" cab, pod type rubber mounted and isolated from power train, roll protected (ROPS); heater, air conditioner and self-purging exterior mounted air filter; 2 speakers and wire harness equipped for radio; custom interior; instrumentation light with 3-position dome light; isolated power lead for accessory hookup; tinted glass; gas assist door opener; inside rear view mirror; convenience center for food and beverage; tool box, rear cab access opening.

Ash Tray and Cigar Lighter.
Color Coded Control Knobs.

Control Console RH side of operator.

Fenders.

Floor Mat.

Roof Cap.

Seat: Case International air/oil suspension, swivel, fore-aft isolator, contoured gray cloth cushions, lumbar support adjustment, weight and height adjustments, seat cushion tilt and back cushion tilt, flip-up arm rests and retractable seat belt.

Steering Wheel: Custom Sport.

3 Slatted Steps with Hand Rails.

Operator Environment Controls. Heater & Air Conditioner — Standard.

Capacity 2 ton (24,000 BTU)

Cab sound pressure level 77.5 dBa

BASIC TRACTOR

STANDARD EQUIPMENT

Air induction system, aspirated. Stratotube precleaner w/dry type final and safety elements and service indicator.
Anti-freeze solution. (-20°F, -29°C)
Brakes:
Hand parking, independent mechanical; foot service, hydraulic self-adjusting, multiple dry disc fully enclosed.
Cab: "Silent Guardian", shock-isolated, rubber-mounted platform; pod type w/roll protection per OSHA; inside mirror, gas-assist door opener, 3-position dome light; self-purging exterior air filter; tool box; food & beverage center; rear cab access opening. Heater/air conditioning, isolated power lead for auxiliary electrical hookup. Tinted glass, ash tray, lighter, floor mat, custom interior.
Console controls conveniently located by operator's seat.
Drawbar extendable, 3-position, 20, 24, 28" (508, 610 and 711 mm), wide-swinging, yoke-type.
Electrical system, 12 volt; alternator 105 amp; starter, two neutral safety switches. Rear-mounted auxiliary 7-terminal SAE electrical outlet.
Elevating hood (one man accessibility).
Engine, 6-cylinder turbocharged diesel, 674 in³ (11 L) displacement.
Fenders, 3 slatted steps and hand rails.
Fuel tanks, (2) total 150 gallons (567 L). Ether start assist (less ether).
Lights: 2 headlights, 2 front floodlights, 2 rear floodlights, 2 amber combination flashing warning and directional lights (cab mounted), 2 tail lights (rear cab).

Muffler with aspirator, curved extension.
Seat, Case International air/oil suspension, swivel, fore-aft isolator, contoured gray cloth cushions, lumbar support adjustment, weight and height adjustments, seat cushion and back cushion tilt, flip-up arm rests, retractable seat belt and custom sport steering wheel.
SMV safety symbol.
Steering, hydrostatic power. Four-way selective: automatic 4-wheel coordinated, front only, rear only and crab. (Electronically controlled.)
Hydraulic remote circuits. (4)
Throttle, hand.
Tilting and telescoping steering column.
Tread, adjustable 74 to 94" (1.88 to 2.39 m) with 18.4 x 34 tires.
Transmission: heavy duty 12-speed constant mesh, w/power shift. 3 on-the-go electrically activated hydraulic power shifts in 4 ranges.
(Standard equipment does not include power takeoff, 3-point hitch.)

OPTIONAL EQUIPMENT

A selection of radio, stereo and cassette (dealer installed). Outside dual rear view mirrors (dealer installed). Three point hitch Category III w/quick coupler, and electronic draft control. Female couplers (couple under pressure), accept ASAE/ISO male coupling. Hydraulic double acting pressure release portable cylinders 4 x 8" (102 x 203 mm) w/hose—150" (3.81 m) hose reach.

Hydraulic stop and detachable hose connections. ASAE/ISO standard male coupler. Power takeoff. 20 splines. 1000 rpm. Diameter 1.75" (44.5 mm). (Independent type with hydraulically engaged multiple wet disc clutch.) Front axle with no-spin differential. Front mounted weight frame accepts up to 26 weights, 100 lbs (45 kg) each. Heater, engine block. Lights, front flood (2). Rear flood lights (4). Optional equipment also includes a complete selection of wheels and tires to meet the requirements of any job application. Automatic engine shutdown kit.

True Ground Speed Sensor

Monitors percentage of actual wheel slippage regardless of engine rpm, wheel/tire selection or soil conditions. Permits precise control of planting monitors and chemical application rates.

IMPORTANT: the total tractor weight with ballast and weight must never be more than 28,500 lbs (12 927 kg).

Attention Worldwide Readers. Local availability, standard specifications and options may vary from those listed or illustrated in this North American publication. Your local Case branch or dealer will gladly advise concerning Worldwide availability and recommended specifications.

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