

QUENTIN CURRIE



2-88/2-110

FIELD BOSS[®] TRACTORS



A quiet, well-organized cab teamed with efficient, hard-working engines and Over/Under three-speed power shift transmission make these tractors ideal for nearly any farming operation.

The 2-88 and 2-110. Power to fit any size farm.



Matching tractor horsepower to the job adds efficiency to nearly any farming operation. And the 2-88 (86 hp*) and 2-110 (107 hp*) Field Boss® tractors from White Farm Equipment Company have features that let them work hard as your main field tractor, or as a second tractor to handle smaller jobs.

Comfort and convenience features. Like our new modular cab, with sound-deadening deluxe upholstery that covers nearly all exposed

interior metal. New gauges and instrumentation that provide you with constant, easy-to-read data on tractor performance. Shift and hydraulic levers located on a right-hand control console—for improved operator comfort and convenience.

Engine features. Like efficient three-ring pistons, improved intake and exhaust porting, an integral oil cooler and aspirator-type air precleaner.

Working features. Like our standard Over/Under transmission that lets you choose from nine field speeds

between two and seven miles per hour. Massive cast iron front frame and axle carriers that make the 2-88/2-110 virtually the heaviest standard-equipped tractors in their power class. Plus a proven Power Front Axle option to let you add four-wheel drive versatility to any job.

All these features and more make the 2-88 and 2-110 Field Boss tractors great all-purpose tractors for nearly any farming operation.

*Manufacturer's estimated PTO horsepower.



This massive front frame casting adds working weight to the front of the tractor, while taking torsional stress off of the engine block. This is especially important with a Power Front Axle.



For more versatility in the field or around the farmstead, the 2-88 and 2-110 are available in four-wheel drive models. Our mechanical Power Front Axle is simple and efficient, plus works in both forward and reverse gears.



A full complement of field and road lights make working or traveling after dark easier and safer. Note how the warning lights on the cab fold back to clear tree branches and other obstructions.

Nine field speeds between 2 and 7 mph.

It's hard to beat the engine, drive train and hydraulics of the 2-88 and 2-110 Field Boss® tractors. Especially in the 80 to 110 horsepower class.

Over/Under standard. You have to work this transmission in the field to really appreciate what it can do. We believe it's the best mid-horsepower tractor transmission sold today.

It starts with six forward gears and two reverse. Then we add the Power Shift—Under Drive, Direct Drive and Over Drive. Three speed ranges in each gear that you can shift on-the-go, under load, without clutching. Eighteen forward speeds, nine in the working range of 2 to 7 mph.

The White Farm Over/Under transmission lets you select your speed to suit changing field conditions. And it's been proven in over fifteen years of on-farm use.

Improved engines. The 2-88 and 2-110 also feature improved versions of the engines proven in our popular 2-85 and 2-105 Field Boss tractors. The 354 cu. in. (5.8L) straight six diesels feature three-ring pistons, integral oil cooler, improved cylinder porting, better gasket seals and a dual element air cleaner with precleaner.

The 2-88 engine, naturally aspirated, is designed to provide years of dependable service. Also standard on this tractor are power hydraulic double disc brakes.

The 2-110 engine is turbocharged for increased performance at higher altitudes. The engine features heavy-duty pistons with steel reinforced top ringlands for long life. Plus piston cooling nozzles for cooler operation. The 2-110 comes with power hydraulic triple disc brakes.

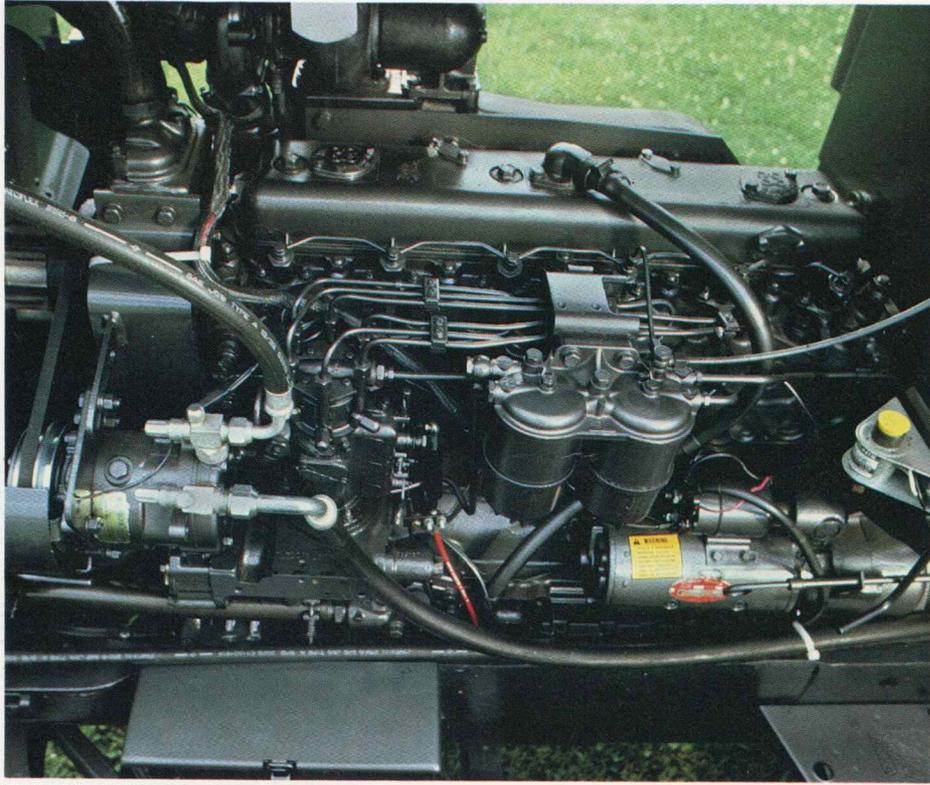


Closed center hydraulics. Both tractors feature our quick-response 20 gpm closed center hydraulic system. This efficient system maintains constant pressure without continually circulating full-flow, so hydraulic oil stays cooler and lasts longer. Category II-I 3-pt. hitch with quick coupler is standard on both tractors; a Category III-II is available.

Lever-type hydraulic couplers let you hook up quickly and easily, even under pressure. Two remote detent valves are standard; a third detent or float valve is optional.

The standard 540/1000 rpm PTO is hydraulically engaged, to let you gently feather PTO-driven machines into action. An engine speed PTO is also standard.

The 2-88 and 2-110 Field Boss tractors combine solid engine improvements with a proven drive train and exceptional hydraulics. These tractors are built to take on the tough jobs. Year after year.



The straight-six diesel engine, either turbocharged or naturally aspirated, is extremely fuel efficient, thanks to improved cylinder intake and exhaust porting and three-ring pistons.



On-the-go shifting between Under Drive, Direct Drive and Over Drive is as easy as moving this conveniently located lever.



Easy to work lever-type couplers are standard equipment.

Travel Speeds (MPH) @ 2200 RPM with 3X6 Over/Under (18.4-38 tires) 2-88/2-110 Two Wheel Drive Models

Gear	Underdrive	Direct Drive	Overdrive
First	1.6	1.9	2.2
Second	3.0	3.6	4.3
Third	3.8	4.5	5.4
Fourth	5.2	6.3	7.5
Fifth	7.2	8.7	10.5
Sixth	12.5	15.1	18.1
Low Reverse	1.8	2.1	2.5
High Reverse	4.2	5.1	6.1



Compare the field speeds on this chart with any other tractor in this horsepower class. Remember, you can shift on-the-go between Under Drive, Direct Drive and Over Drive.

Nobody builds a better cab.

We don't believe there's a better cab offered today than the new modular cab on the 2-88 and 2-110 Field Boss[®] tractors. Because White Farm has combined incredible quiet and comfort with convenient controls, full instrumentation and exceptional operator vision.

Modular design means that the cab, steering unit and controls are one integrated unit, separate from the rest of the tractor. Because it's isolated from the tractor chassis, noise and vibration are kept to a minimum.

Surrounding the deluxe, fully-adjustable operator seat is a cushion of sound-deadening upholstery that covers nearly all exposed interior sheet metal. Noise levels are less than 80 db. Power steering is standard; the wheel both tilts and telescopes.

The cab is pressurized to keep dust out. An improved air conditioning system keeps you cool in summer; a powerful heater keeps you warm when the temperature drops. But if you want to open the windows, just flip the convenient levers on the side and back windows. To make long days more pleasant, White Farm offers AM/FM radio, AM/FM stereo, AM/FM/8-track and AM/FM/cassette as options.

Every component of the 2-88 and 2-110 Field Boss tractors is designed to help you be more productive. One day in our cab, and you'll see what we mean.

A convenient right-hand console puts the gear shift lever, hand throttle, Over/Under shift lever, 3-pt. hitch, hydraulics, PTO lever and parking brake at your fingertips.

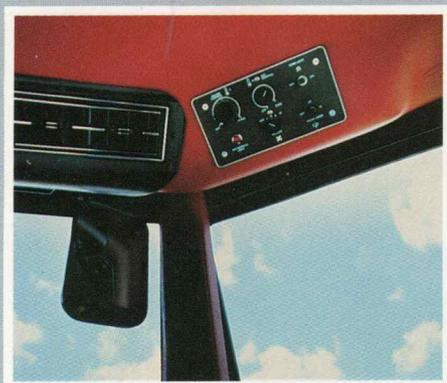




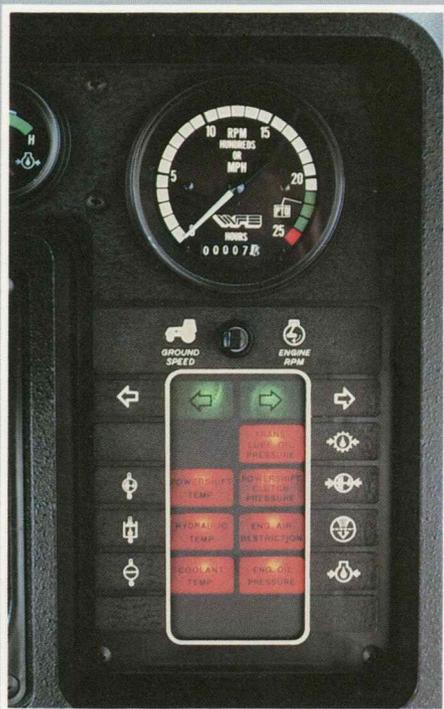
Cab entry and exit are easy, thanks to the wide door opening, steps and hand holds.



Front and side vision are exceptional. Rear vision is so good you can see both the 3-pt. hitch and drawbar without straining.



Heater, air conditioning, dome light and windshield wiper controls are conveniently located on the upper right.



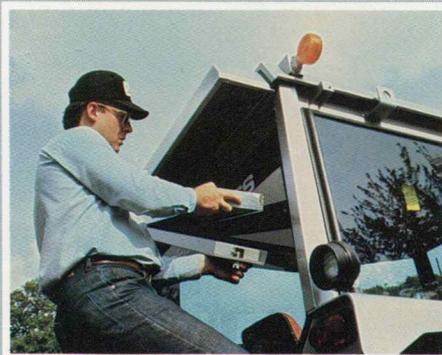
Full dash instrumentation includes (left hand photo) tach/speed/hour meter; warning lights for Over/Under oil, hydraulic oil and coolant temperature; transmission lube, Over/Under clutch and engine oil pressure; and engine air restriction. Gauges (top right photo) include voltmeter, coolant temperature, fuel level and engine oil pressure. Light switches (lower right) let you select the right lights for the job.



Service is simple. Options add versatility.

Daily service is a big part of operating any tractor, and the 2-88 and 2-110 Field Boss® tractors make it easy. With features like steps that allow you to fuel from either side of the tractor. Conveniently placed dipsticks and filters. Engine side and front panels that remove easily and quickly, leaving engine components accessible.

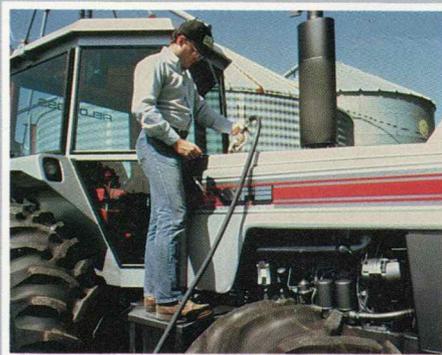
Whether daily fueling and checking oil levels, or changing filters and servicing at regular intervals, the 2-88 and 2-110 Field Boss tractors make maintenance a breeze.



Cab air filter.



Removable engine side panels.



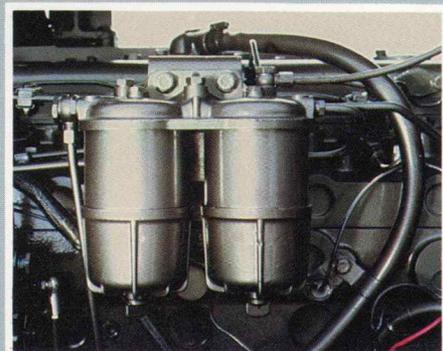
Fuel from either side.



Dual air cleaner with aspirated precleaner.



Hydraulic & transmission dipstick.



Dual fuel filters.



Two low-maintenance batteries.



Over/Under oil dipstick.

Performance Options.

You don't need many options with the 2-88 and 2-110 Field Boss tractors. But, depending on your operation, you may want to add features for more performance.

Power adjust wheels: Cast iron wheels and rims.

Duals: Pressed steel wheels and rims; cast iron wheels with demountable or power adjust rims.

Rear wheel weights: Add up to 1,150 lbs. with these 115-lb. weights. Available for demountable and power adjust wheels.

Front frame weights: Add up to 720 lbs. (2-88) or 990 lbs. (2-110) with these 90-lb. satchel weights. The cast iron bracket comes standard.

96" axles: Required for duals. Standard on the 2-110, optional on the 2-88.

Additional hydraulic valves: Two remote detent valves are standard with the Category III-1 3-pt. hitch. Also available are one detent and one float valve, or two detent and one float valve.

Category III-II 3-pt. hitch: With your choice of two detent valves, one detent and one float valve, or two detent and one float valve.

Wide swinging drawbar: Improves agility when pulling wheatland-type tools. Comes with two or three remote detent valves. Not available on tractors equipped with 3-pt. hitch.

4-post R.O.P.S. with canopy: Meets and exceeds industry safety standards.

Front end loader: Ask your White Farm dealer about the right loader for your model tractor.



Go with a Power Front Axle.

Our optional Power Front Axle can add 4WD performance and versatility to any 2-88 and 2-110 tractor. Whether in field or feedlot, mud or snow, on a hillside or in gumbo, the proven White Farm Power Front Axle can help you pull through faster and more efficiently.

Our direct mechanical drive PFA has been proven in over twenty years of on-farm use. It delivers power to the wheels without wasting it in separate hydraulic systems. Plus the White Farm Power Front Axle works in both forward and reverse.

Our cast iron front frame makes the 2-88 and 2-110 ideal for four-wheel

drive. The massive casting not only adds traction-boosting weight to the front end, it easily handles the stress of four-wheel drive. Some other manufacturers rely on the engine block to absorb this additional stress.

Ask your White Farm dealer about all the advantages of a 2-88 or 2-110 Field Boss with Power Front Axle option. It can keep you going when the going gets tough.

2-88/2-110 specifications

Engine Features

Direct fuel injection
 Turbocharger (2-110)
 Piston cooling nozzles (2-110)
 Full pressure lubrication system
 Full flow oil filter
 Pressure cooling system with centrifugal pump, thermostatic control
 Dry-type, dual stage twin element air cleaner with built-in aspirated precleaner
 Three ring pistons
 Coolant heater

Drive Train

13-inch single plate cerametallic clutch
 3X6 Over/Under transmission (standard)
 Base Transmission

- Constant-mesh helical gears
- Pressure lubricated
- One shift lever, gated pattern
- Six forward speeds, two reverse
- Single lever, three position shifter

 Over/Under Power Shift

- Three range, shift on-the-go
- Eighteen forward speeds, six reverse
- Single lever, three-position shifter

Power hydraulic triple disc brakes (2-110)
 Power hydraulic double disc brakes (2-88)
 Parking brake

Hydraulics

Closed center system—constant pressure, full-time power
 Two remote detent valves, 3-pt. hitch
 20 gpm capacity @ 2200 rpm (75.7 L/min.)
 System pressure 2250 psi (154.66 kg/cm²)
 Lever couplers

3-pt. hitch

Category II adjustable to Cat. I (standard)
 Category III adjustable to Cat II (optional)
 Draft control

Power Take Off

Independent 540/1000 rpm
 Engine-speed PTO

Electrical

12-volt starter
 Two 6-volt low maintenance batteries
 61 amp alternator
 Two 50 watt sealed beam headlights w/dimmer
 Four 35 watt flood lights
 Two tail lights

Two amber 4-way flashing lights w/turn signals

Instrumentation

Combined tach-speed-hour meter
 Engine oil pressure gauge
 Voltmeter
 Coolant temperature gauge
 Fuel gauge
 Warning lights with alarm buzzer:
 Engine oil pressure, coolant temperature, air restriction, hydraulic oil temperature, Over/Under clutch pressure, Over/Under temperature, transmission lube pressure, turn indicator

Optional equipment

Power Front Axle
 Wide-swing drawbar
 Rollover protective structure with canopy
 Power adjust rear wheels
 Duals
 Additional detent or float remote outlets
 Satchel-type front weights
 Rear wheel weights
 AM/FM radio**
 AM/FM stereo**
 AM/FM/8-track**
 AM/FM/cassette**

Modular Cab

Integral R.O.P.S. frame
 Air conditioner
 Heater
 Pressurizer with self-cleaning filter
 Hand and foot throttle
 Deluxe adjustable arm rest seat
 Tilt-telescoping steering wheel
 Hydrostatic power steering
 Windshield wiper

**Field-installed only

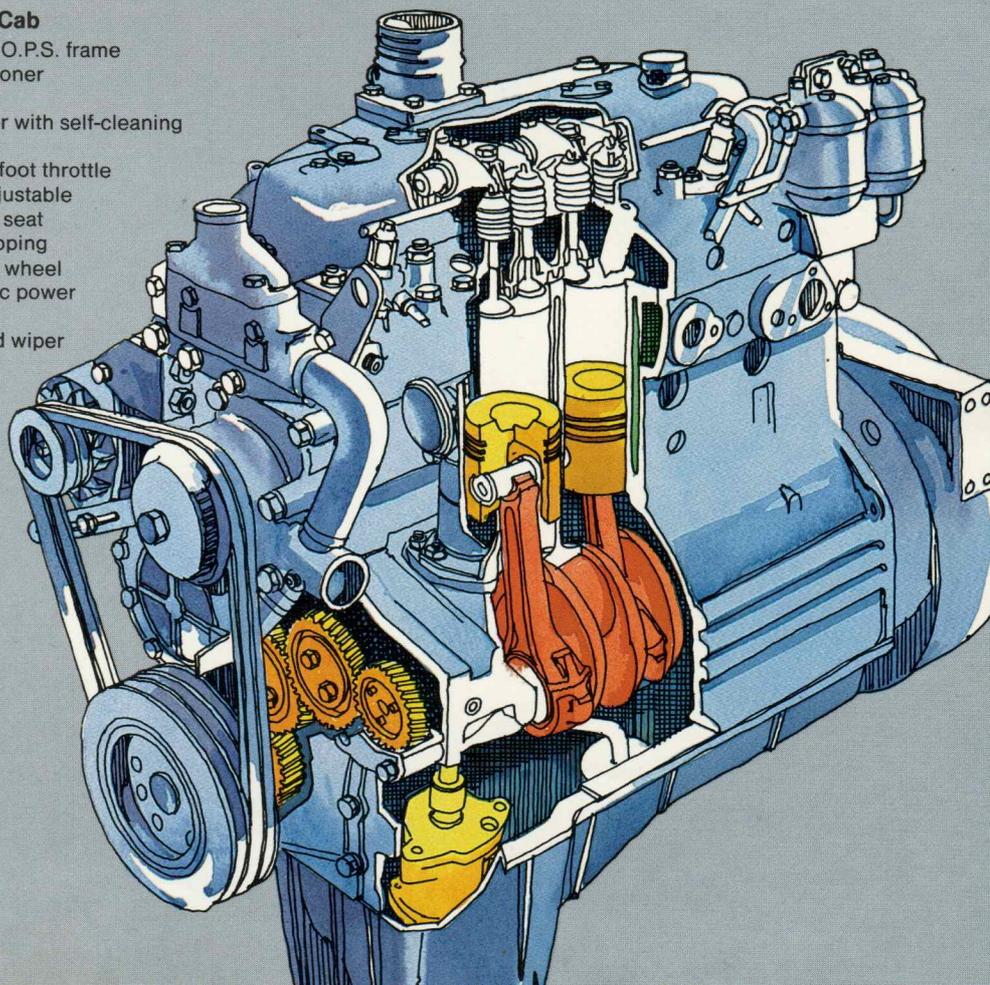
Engine Specifications

	2-110	2-88
6-cylinder diesel	Turbocharged	Naturally aspirated
Displacement	354 cu. in. (5.8 L)	354 cu. in. (5.8 L)
PTO Horsepower*	107	86
Compression Ratio	16:1	16:1
Bore & Stroke	3.875" x 5.00" (98.43 mm x 127 mm)	3.875" x 5.00" (98.43 mm x 127 mm)
Governed Speed Range	775-2420 rpm	775-2420 rpm
Rated Speed	2200 rpm	2200 rpm

*Manufacturer's estimated PTO hp.

Travel Speeds (MPH) @ 2200 RPM with 3X6 Over/Under (18.4-38 tires) 2-88/2-110 Two Wheel Drive Models

Gear	Underdrive	Direct Drive	Overdrive
First	1.6	1.9	2.2
Second	3.0	3.6	4.3
Third	3.8	4.5	5.4
Fourth	5.2	6.3	7.5
Fifth	7.2	8.7	10.5
Sixth	12.5	15.1	18.1
Low Reverse	1.8	2.1	2.5
High Reverse	4.2	5.1	6.1



Tire Sizes

		2-110		2-88	
		Rear	Front	Rear	Front
Two Wheel Drive Models	Singles	18.4-34, 6P, R1 18.4-34, 6P, R20 16.9-38, 8P, R1 18.4-38, 6P, R1, (Standard) 18.4R-38, 6P, R1, Radial 18.4-38, 6P, R20 18.4-38, 8P, R1 18.4-38, 8P, R20 20.8-34, 6P, R1 20.8-38, 8P, R1 20.8R-38, 8P, R1, Radial 20.8-38, 8P, R20 23.1-30, 8P, R1 23.1-34, 8P, R1 23.1-34, 8P, R20	11L-15, 6P, F2, (Standard) 11.00-16, 6P, F2 11.00-16, 8P, F1	16.9-34, 6P, R1 18.4-34, 6P, R1, (Standard) 18.4-34, 6P, R20 15.5-38, 8P, R1 16.9-38, 6P, R1 18.4-38, 6P, R1 18.4R-38, 6P, R1, Radial 18.4-38, 6P, R20 20.8-34, 6P, R1 20.8-38, 8P, R1	7.50-16, 6P, F2 7.50-18, 6P, F2 9.5L-15, 6P, F2, (Standard) 11L-15, 6P, F2 11.00-16, 6P, F2
	Duals	18.4-34, 6P, R1 18.4-38, 6P, R1 18.4R-38, 6P, R1, Radial 20.8-38, 8P, R1 20.8R-38, 8P, R1, Radial 16.9-38, 6P, R1	11L-15, 6P, F2 11.00-16, 6P, F2 11.00-16, 8P, F1	18.4-34, 6P, R1 18.4-38, 6P, R1 18.4R-38, 6P, R1, Radial 15.5-38, 6P, R1 16.9-38, 6P, R1	9.5L-15, 6P, F2 11L-15, 6P, F2 11.00-16, 6P, F2
Four Wheel Drive Models	Singles	18.4-38, 6P, R1, (Standard) 18.4R-38, 6P, R1, Radial 18.4-38, 8P, R1 23.1-34, 8P, R1 20.8-38, 8P, R1 20.8R-38, 8P, R1, Radial	16.9-24, 6P, R1 16.9-26, 8P, R1	18.4-38, 6P, R1, (Standard) 18.4R-38, 6P, R1, Radial 20.8-38, 8P, R1	16.9-24, 6P, R1 16.9-26, 8P, R1
	Duals	18.4-38, 6P, R1 18.4R-38, 6P, R1, Radial 20.8-38, 8P, R1 20.8-38, 8P, R1, Radial	16.9-24, 6P, R1 16.9-26, 8P, R1	18.4-38, 6P, R1 18.4R-38, 6P, R1, Radial	16.9-24, 6P, R1

Wheel Treads (with 18.4-38 Tires) Rear—Singles—61¼"-119½" (144.8 cm-303.5 cm) Front—60"-84" (153.8 cm-215.4 cm)

Dimensions with 18.4-38, R1 rear tires (2WD) (2-88 & 2-110)

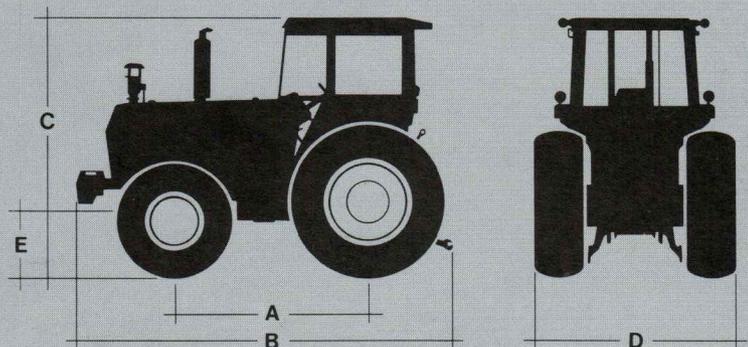
A Wheelbase	109¾ in. (278.45 cm)
B Length	166¾ in. (421.96 cm)
C Height (top of cab)	116 in. (294.6 cm)
D Width (minimum) (2-88)	80¾ in. (204.8 cm)
D Width (minimum) (2-110)	96 in. (243.8 cm)
E Ground clearance*** front axle	25¾ in. (65.4 cm)
Rear axle	25¾ in. (65.1 cm)
Drawbar	13½ in. (34.3 cm)
Turning radius w/brakes	155 in. (397.4 cm)
w/o brakes	187 in. (474.9 cm)
Average shipping wt***	11,685 lbs. (5300 kg) approx. with cab and air cond.

***with 3-pt. hitch and 3X6 Over/Under transmission

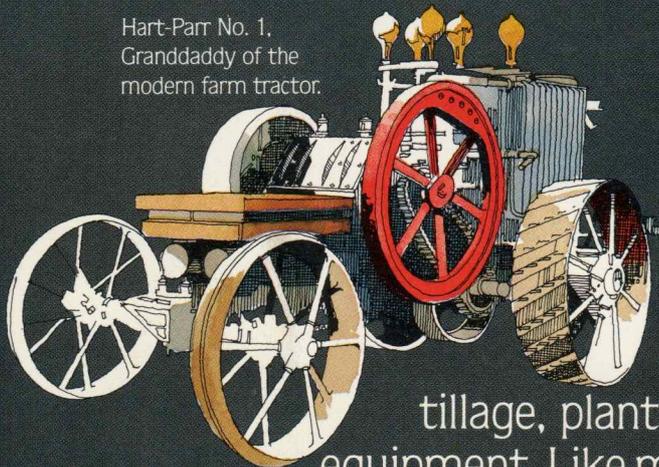
Manufacturer reserves the right to change design and/or specifications without notice or obligation.

Capacities (2-88 & 2-110)

	U.S. Measure	Metric	Imperial
Fuel total	58 gal.	219.55L	48.30 gal.
Main tank	26 gal.	98.42L	21.65 gal.
Side tank	32 gal.	121.13L	26.65 gal.
Cooling system	24 qts.	22.71L	4.98 gal.
Crankcase w/filter	16 qts.	15.14L	3.32 gal.
3X6 Over/Under Transmission	3.5 qts.	3.31L	0.7 gal.
Transmission & Final Drive	43 qts.	40.69L	8.9 gal.
Hydraulic System Reservoir w/o 3-pt. hitch	36 qts.	34.66L	7.5 gal.
w/ 3-pt. hitch	33 qts.	31.23L	6.9 gal.



Hart-Parr No. 1,
Granddaddy of the
modern farm tractor.



One hundred fifty-six years is a lot of experience in the farm equipment business. Yet that's how long our company has been going strong. Building tillage, planting, harvesting and farm power equipment. Like most farm equipment companies, we're an evolution of many early and more recent leaders —American Seeding Machine Company, Oliver® and Minneapolis-Moline® to name a few. Yet one of our most famous is Hart-Parr Oil Tractors. Our founders at Hart-Parr built the world's first production farm tractor in 1901. It's on exhibit today in the Smithsonian Institution. Through the years, we've made many innovations in farm equipment. Today, White Farm Equipment Company is still in the forefront of farm equipment design. Because building solid, innovative farm equipment for American farmers is our most important concern. And, like our farmer customers, we're in the farm business to stay.

The 2-110 Field Boss® tractor, one of today's most popular mid-size field tractors from White Farm Equipment Company.

White Farm Equipment Company
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Form No. P271 40M82

