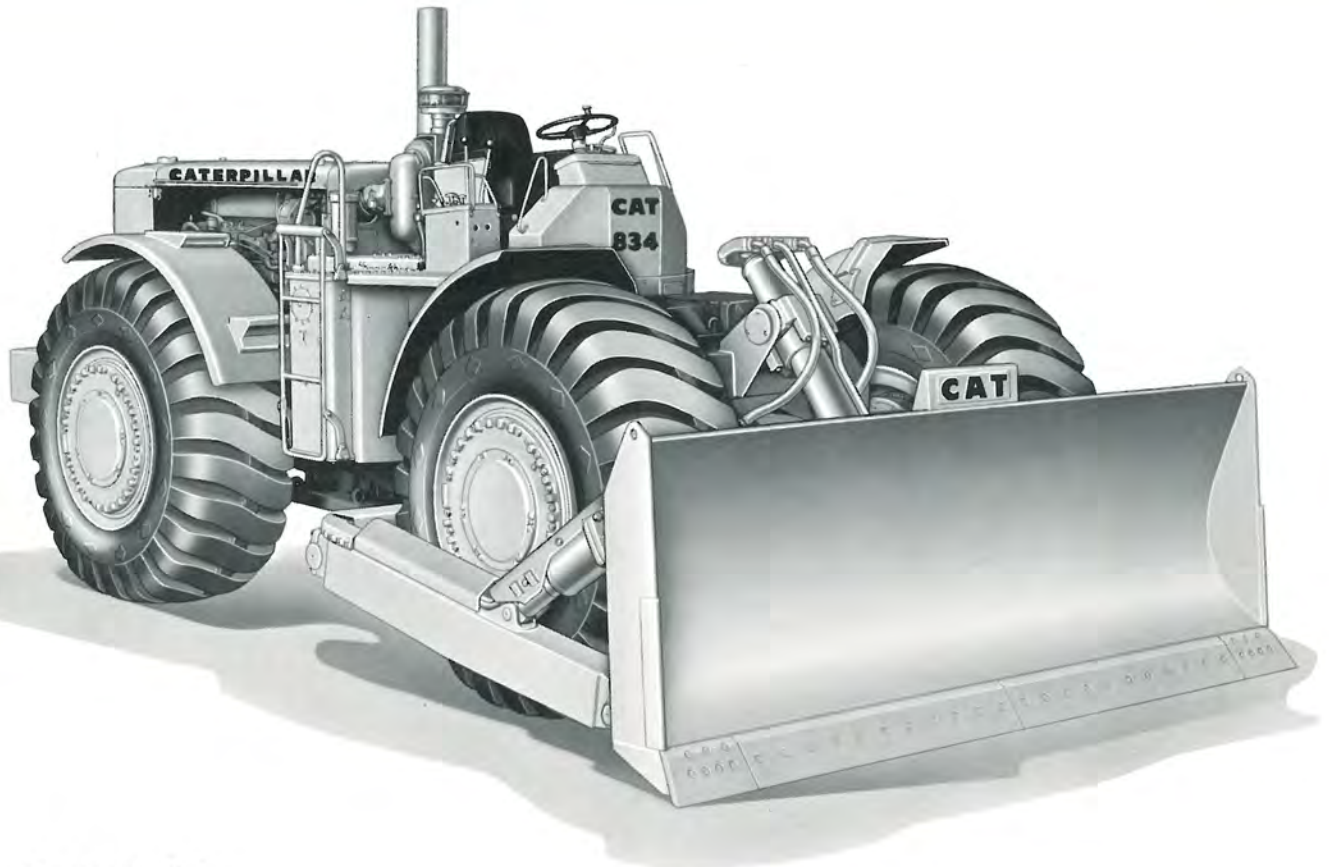


WHEEL TYPE TRACTOR

CATERPILLAR

834

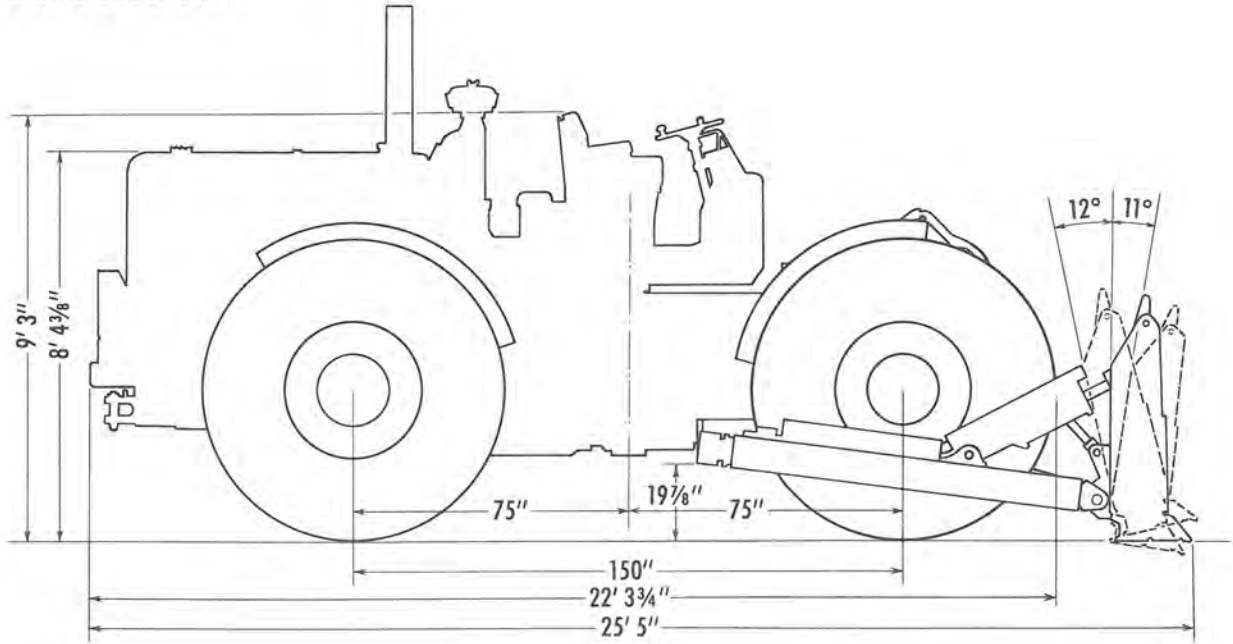


The CAT 834 —

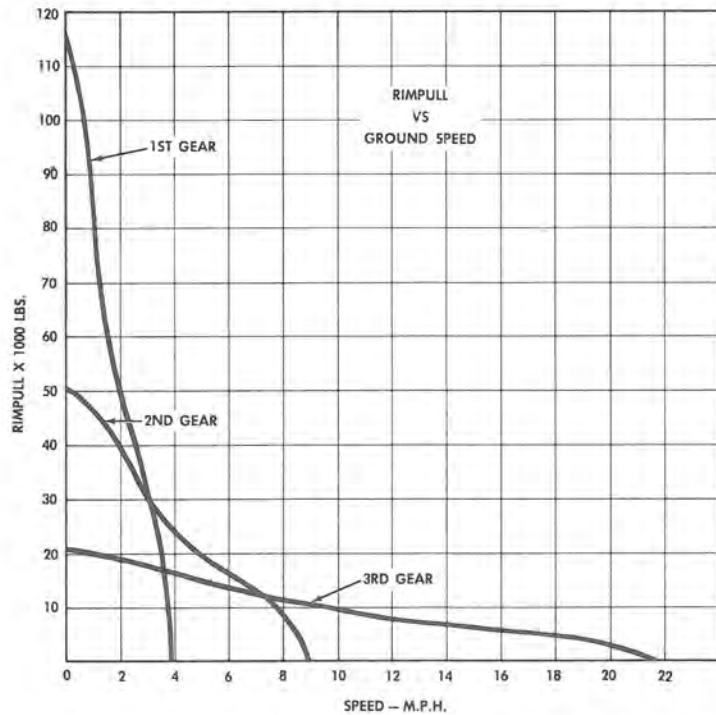
Wheel type tractor

- 360 HP (flywheel) engine with Variable Timing fuel system for efficient, high torque rise power.
- Cat power shift transmission with exclusive Torque Divider gives solid feel of direct drive . . . flexibility of torque converter.
- Articulated frame design and constant velocity steering for unmatched maneuverability. Articulation angle of 44° each way.
- Self-adjusting expander tube brakes for full 360° braking action.
- Safe, comfortable operator's compartment reduces fatigue — increases productivity.
- Hydraulic tip and tilt bulldozer with full-width skid shoe provides high production and versatility.

DIMENSIONS:



Length, overall (w/o dozer).....	22' 3 3/4"
Width, overall (w/o dozer).....	10' 11 3/8"
Height, (measured to highest point exclusive of stack and precleaner).....	9' 3"
Ground clearance, minimum.....	19 7/8"
Rear axle oscillation.....	27 5/8"
Turning radius	
To outside of tires.....	20' 11"



The maximum pull will depend on traction and weight of fully equipped tractor.

ENGINE:

Four-cycle, turbocharged, valve-in-head, diesel.
 Horsepower (Maximum) 420
 The maximum rating of the diesel engine used in the 834 is shown for comparative purposes.
 Horsepower (Flywheel) @ 2000 RPM 360
 Flywheel horsepower is the net horsepower at the flywheel of the standard engine operating under normal temperature and barometric conditions (up to 85° F. and 2500 ft. altitude). Standard engine equipment includes fan, air cleaners, water pump, lubricating oil pump, fuel pump and generator.
 Number of cylinders 6
 Bore and stroke, in. 5.4 x 6.5
 Piston displacement, cu. in. 893
 NACC horsepower for USA tax purposes 70
 Lubrication Full Pressure
 Bearings: Main and connecting rod bearings are steel-backed aluminum alloy, lead-tin plated, precision-type.
 Crankshaft: High carbon steel with "Hi-Electro" hardened journals.
 Air cleaners: Dry type

FUEL:

Burns economy-type No. 2 Fuel Oil (ASTM Specification D396-48T), often called No. 2 furnace or burner oil, with a minimum cetane rating of 35. Expensive, premium-quality diesel fuel can be used, but is not required.

STARTING METHODS (Optional):

24-volt starting system with 200 ampere hour batteries for direct electric starting of diesel. Includes glow plugs for preheating precombustion chambers.
 Gasoline starting engine with 12-volt starting motor.

TRANSMISSION:

Caterpillar-built planetary power shift with Torque Divider. Combines direct drive and torque converter drive. Torque converter automatically adjusts rim-pull to the load within the following speed ranges:

Gear	Forward	Reverse
1	0-3.7	0-4.1
2	0-8.6	0-9.4
3	0-21.1	0-23.0

DIFFERENTIAL:

Conventional bevel gear and pinion.

FINAL DRIVE (all wheels):

Type Planetary
 Axle Full-floating

CHASSIS:

Frame — plate and rolled section fabrication.
 Pivot points — Hardened steel pins, ¼" diameter
 Upper bearing — manganese bronze sleeve
 Lower bearing — double taper roller

TIRES, wide-base, tubeless (Front and rear):

Compounding—Cut and abrasion resistant, Loader-Dozer
 Size (standard) 29.5-35 (22 PR)
 (optional) 33.25-35 (20 PR)
 Tread, rock or traction 100"
 Wheelbase 150"

BRAKES:

Service Full hydraulic expander tube, 26" x 5"
 Parking . . Mechanical, internal expanding, 12" x 5"

HYDRAULIC SYSTEM:

Full flow filter protects pump and cylinders from abrasive particles in oil.
 Implement pump (vane type)
 Output 80 GPM @ 2000 RPM @ 1000 PSI
 SAE No. 10 oil @ 150° F.
 Relief valve opening pressure 1800 PSI
 Steering pump (vane type, tandem section)
 Output
 (large section) . 80 GPM @ 2000 RPM @ 1000 PSI
 (small section) . 13 GPM @ 2000 RPM @ 1000 PSI
 SAE No. 10 oil @ 150° F.
 Relief valve opening pressure
 (large section) 1500 PSI
 (small section) 2500 PSI

HYDRAULIC CYLINDERS:

Steering (2), double acting with mechanical follow-up linkage.
 Bore and stroke 5" x 28¾"
 Bulldozer lift (1), double acting.
 Bore and stroke 6½" x 29½"
 Bulldozer tip (left side), double acting.
 Bore and stroke 834S 834C
 6" x 10" 6½" x 10 5/8"
 Bulldozer tip and tilt (right side), double ended.
 Bore and stroke 6½" x 10" 6" x 10 5/8"
 6" x 3"

CONTROL SYSTEM: Raise, lower, hold and float positions. Single lever for tip and tilt.

CAPACITIES:

U. S. Gallons

Fuel tank 150
 Lubricating system:
 Crankcase 9¾
 Transmission 26½
 Differential (front) 8¼
 (rear) 9¾
 Final drive (each) 6
 Cooling system 27
 Hydraulic tank 31

WEIGHT, lb. operating (approx.):

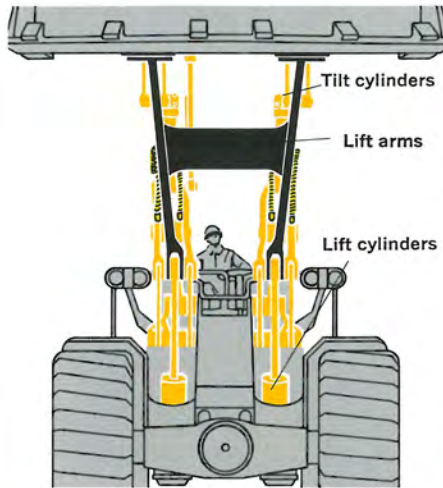
With 834S Bulldozer 90,600
 With 834C Bulldozer 90,000

STANDARD EQUIPMENT: Adjustable seat, air cleaner service indicator, counterweights, dual service brake pedals, electric horn, fenders, hydraulic lines guard, lockable instrument panel cover, mechanical parking brake, pull hook, retractable operator's ladder, reversible fan, 12 or 24 volt alternators and batteries, wheel spinner.

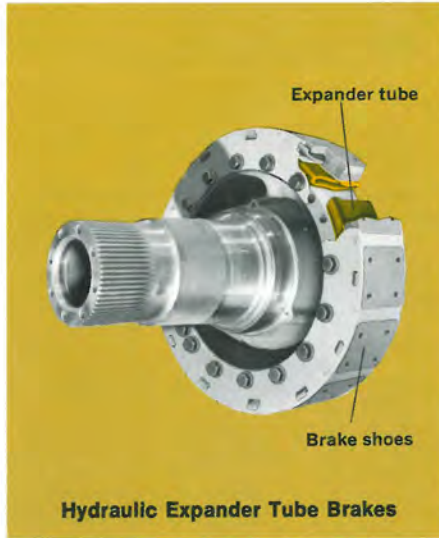
ATTACHMENTS: Bulldozer push cup, cushion push block, cab, defroster, locking type differential, rear view mirror, seat belts, windshield, windshield wipers, 12V and 24V lighting systems (4 lamps front, 2 rear).

CONVERSION TABLE

1 Mile = 1.609 Kilometers	1 Lb. = .4536 Kilogram
1 Foot = 30.48 Centimeters	1 Sq. In. = 6.452 Sq. Centimeters
1 Inch = 2.54 Centimeters	1 Sq. Ft. = 929 Sq. Centimeters
1 U.S. Gal. = 3.785 Liters	1 Sq. Yd. = 0.836 Sq. Meters
1 U.S. Gal. = 0.833 Imp. Gals.	1 Cu. Yd. = 0.7646 Cu. Meters
1 U.S. Gal. Diesel Fuel = 7.3 Lb. (approx.)	
1 U.S. Gal. Coolant = 8.3 Lb. (approx.)	



In-line Lift Arms, Cylinders and Linkage



Hydraulic Expander Tube Brakes

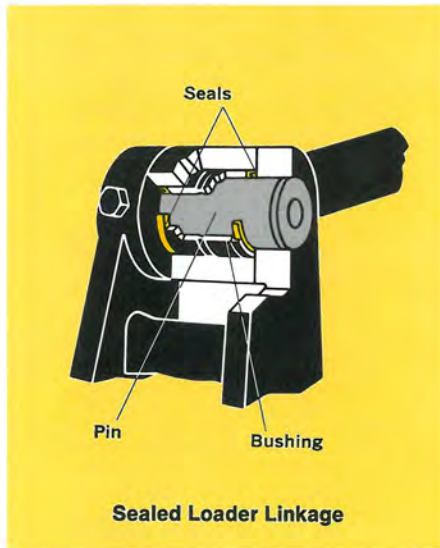
In-line lift arms, cylinders and linkage transmit hydraulic forces in a straight line to the bucket. Linkage points are supported on both sides... to absorb shock loads from the bucket, which are seldom centered but occur any place along the cutting edge.

Hydraulic expander tube brakes stop the 988 smoothly with full-circle action. Expander tube design provides uniform 360° braking action to prevent distortion and grab. They're four-wheel and self-adjusting to protect both your machine and operator.

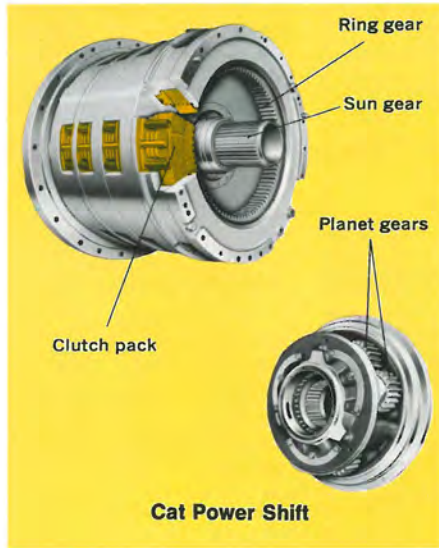
Sealed linkage reduces regular greasing of lift arm pivot points to once every 250 service meter units. (Bucket hinge pins need grease every 100 SMU since they are closer to the work.) Lip-type seals on each pin hold lubricant in, hold out wear-causing grit. Pins and bushings last longer, and less time and money are spent for routine maintenance.

Planetary power shift transmission is designed for tough work... with big clutch packs. Hydraulic modulation cushions clutch engagement for full-power, on-the-go shifting. Planet gears spaced 120° apart spread out stresses for longer life. Oil cooling and lubrication reduce heat and wearing friction.

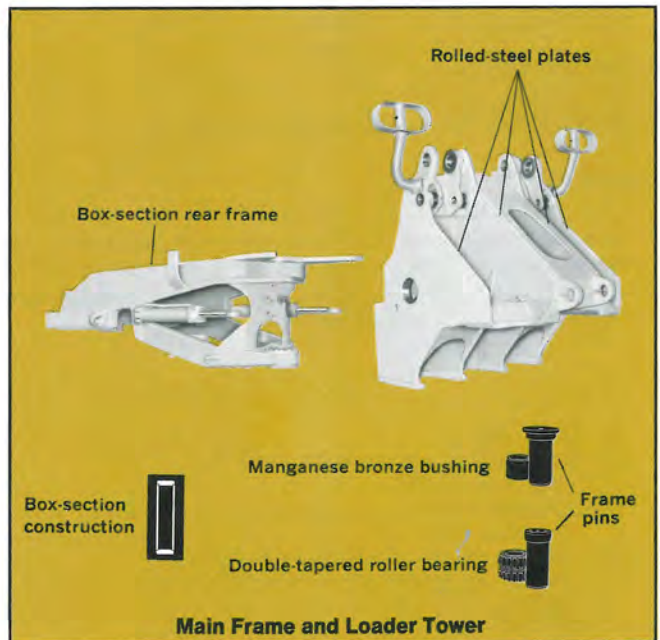
Box-section main frame and loader tower resist twisting and bending on rough ground. Bucket lift arm pins and hydraulic cylinder mounting pins are supported on both ends by steel plates in the loader tower, rather than on a single side, as with cantilever mounting. Two hardened steel pins couple the front and rear frames. The bottom pin rides in double-tapered roller bearings; the upper, in a wide-contact manganese bronze bushing.



Sealed Loader Linkage



Cat Power Shift



Main Frame and Loader Tower

Bulldozer: Complete bulldozer consists of blade, push arms, stabilizing member*, trunnion mounting*, full length skid shoe with replaceable wear plates, reversible cutting edges, self-sharpening end bits, hydraulic lift cylinder, tip and tilt cylinders, hydraulic lines guard*, three (3) spool hydraulic control valves.

*834S Bulldozer, only.

Overall Dimensions of tractor with bulldozer:

	834S	834C
Length	25' 5"	25' 8"
Width	14' 8"	12' 3"
Turning radius (measured to outside corner of blade)	23' 8"	23'

Blade:

	834S	834C
Length	14' 8"	12' 3"
Height	4' 9"	4' 9"
Maximum ground clearance under skid shoe (blade tipped full forward)	3' 4"	2' 11"
Maximum drop below ground	1' 6"	1' 6"
Maximum tilt adjustment	48"	24"
Maximum tip adjustment	18"	22"
Maximum lifting capacity (lbs.)	25,500	—
Lift speed (@ rated engine speed), F.P.S.	1.7 ave.	2.0 ave.
Construction	Multiple box section	
Maximum contact speed (MPH)	3	
Force required for maximum blade deflection (lb.)	—	100,000

Moldboard:

Material	HT Steel
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Cutting Edges (2), reversible:

Length	69 7/8"	55 1/2"
Width and Thickness	10" x 1"	10" x 1"
Material	"Hi-Electro" Hardened Steel	

End Bits (2), self-sharpening:

Length, each	18"	18"
Width and Thickness	10" x 1"	10" x 1"
Material	"Hi-Electro" Hardened Steel	

Skid Plates, reversible:

Number	3	2
Length, each end	45 7/8"	43 7/8"
center	51 7/8"	55 1/2"
Width and Thickness	10" x 1"	10" x 1"
Material	"Hi-Electro" Hardened Steel	

Materials and specifications are subject to change without notice.

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