

CASE[®] INDUSTRIAL rubber-tired BACKHOE-LOADER

MODEL

420

— The only power-digger in the low-price field with

- TORQUE CONVERTER
- Shuttle transmission
- Power-steering



LOADER

2000-lb. cap. self-levelling bucket



BACKHOE

- Digs 12½ ft. deep
- Reaches 16 ft. from pivot
- Lifts 3000-lb. loads
- 8 ft. 3 in. dump clearance

Backhoe features:

Ruggedly-built backhoe reaches farther, digs deeper than others in its class. Telescoping stabilizers are independently controlled for level digging, better balance and stability. 19" bucket standard, with choice of 8 other optional sizes and types.

Exclusive hydraulic foot-controlled 180° swing

leaves both hands free to operate the heavy-duty box-section boom and dipper stick. Pivot-points are equipped with replaceable hardened steel pins and bushings for long, trouble-free life.

Loader features:

Big 21 gpm hydraulic pump and 20% more powerful 3" lift cylinders combine with 25° bucket rollback to develop 4600 lbs. break-out force, 2000 lbs. lift capacity. Wide 63¾" self-levelling bucket rolls forward 90° for precision grading and backfilling. Hydraulic pump delivers full power at all times, because torque converter maintains constant engine rpm.

Heavy-duty box-welded loader frame and loader arms, plus sturdy steel cross brace, insure crisp, straight digging without distortion.

Tractor features:

High-torque 148-cu. in. Case valve-in-head engine with torque-converter drive develops up to 12,000 lbs. drawbar push or pull. Torque converter can be "locked out" for backhoe operation and high speed highway travel.

Hydraulic power-steering and fast shuttle-shift, with reverse speeds 24% faster than forward in each gear, speed loading and backfilling.

One-piece drop-forged axle eliminates failures encountered with 3-piece or spindle-type axles. Comfortable seat, with cushioned back and arm rests, reverses for operating backhoe or loader. What's more, all controls on tractor are easily reached from either seat position.

More muscle . . . more hustle!

Here, at last, is a low-priced backhoe-loader on rubber that gives you more muscle, more hustle, than any other rig in its class. Not only do you get a powerfully-built backhoe for heavy-duty trenching . . . you also get the first low-cost loader actually designed for production digging. Reason for the tremendous digging power of the "420" loader is its torque-converter drive, which provides up to 56% greater push-power, automatically adjusts travel speeds to varying loads, and

eliminates engine stalling. The converter also increases traction because you can "ease" the loader bucket into ground or stockpile and apply extra power smoothly — through an infinite number of speed ratios — without clutching or spinning the wheels. You get a full bucket every time, and you deliver more payload because non-spill bucket automatically stays level all the way up! Call your Case Industrial Dealer for a convincing "420" demonstration on your job — TODAY!

Complete unit engineered, built and fully warranted by
J. I. CASE COMPANY • RACINE, WISCONSIN, U. S. A.



1st in quality for over 100 years

Specifications for CASE "420" RUBBER-TIRED INDUSTRIAL BACKHOE-LOADER

BACKHOE OPERATING DATA

Bucket widths available: 14", 16", 19" (Std.), 24", 30" trenching; 16" and 30" bellhole; 36" bellhole-grave; 36" grave
 Free swing arc 180°

LOADER OPERATING DATA

	Standard	Optional
Bucket sizes — SAE rated cap.	15 cu. ft.	3/4 cu. yd.
SAE struck cap.	12 cu. ft.	17 cu. ft.
Overall width	63 3/8"	79 3/8"
Max. lift to full height	2000 lbs.	
Max. breakaway (to 12")	4600 lbs.	
Lifting time	4.7 sec.	
Dumping time	2.2 sec.	
Lowering time	3.3 sec.	

ENGINE

Make and Model (cu. in. displ.)	Case G-148
Gross engine flywheel horsepower	47*
Max. drawbar horsepower (Est.)	33
Max. lbs. pull or push	12,000
(assuming adequate traction)	
Max. torque (ft.-lbs.)	128 @ 1900 rpm
Cylinders, no. (valve-in-head)	4 (wet sleeve)
Bore and stroke	3 3/8" x 4 1/8"
Ignition	Coil & dist.
Starting	12-volt electric
Carburetor	Up-draft
Air cleaner	Oil bath
Oil filter	Renewable cartridge
Governor	Mechanical fly-weight
Lubrication	Positive pressure
Cooling system — type	Pressurized pump

CAPACITIES

Cooling system	13 qts.
Fuel tank	13.7 gal.
Crankcase	4 qts.
Trans. and diff.	13 qts.
Hydraulic system	18 gal.

POWER TRAIN

Clutch (friction, single dry ferrometallic disc)	9 1/2" dia.
Transmission	Sliding spur gear with synchronized shuttle shift

SPEEDS with 13" x 24" tires

Direct Drive (Travel)

	Low Range	1st	2nd	3rd	4th	Direct Range	1st	2nd	3rd	4th
Forward	1.8	2.6	3.5	12.0	Forward	3.0	4.3	5.7	19.3	
Reverse	2.3	3.3	4.4	14.9	Reverse	3.7	5.4	7.1	24.0	

Torque-Converter Drive 0 to 19.2 mph

4 speeds and 2 ranges, forward and reverse

BRAKES

Foot, double-disc. Individual rear wheel pedals can be locked or operated individually.	6" dia.
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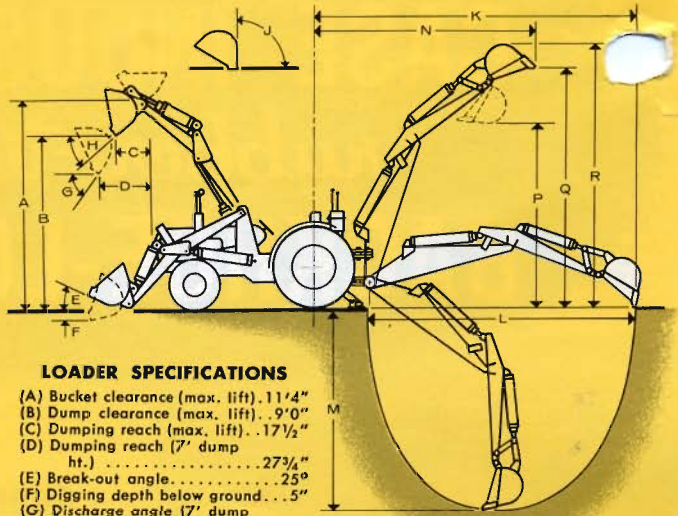
STEERING

Cam and lever with hydraulic power assist. Turning radius	10'
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DIMENSIONS AND WEIGHTS (with backhoe and loader)

Overall length (backhoe and loader) at carry	20'8"
Overall width (to outside of drive tires)	78"
Height (top of backhoe at carry)	10'3"
Height (top of loader frame)	64 1/2"
Tread, front	47 1/2"
rear	64"
Tires (standard)	
front	7.50 x 16
rear	13 x 24
Wheelbase	75 1/4"
Ground clearance	10 3/4"
Approximate weight	7740 lbs.

*Sea level (calculated) maximum HP (based on 60° F. and 29.92" Hg.) Manufacturer's rating. Nebraska test not yet available.



LOADER SPECIFICATIONS

- (A) Bucket clearance (max. lift) 11'4"
- (B) Dump clearance (max. lift) 9'0"
- (C) Dumping reach (max. lift) 17 1/2"
- (D) Dumping reach (7' dump ht.) 27 3/4"
- (E) Break-out angle 25°
- (F) Digging depth below ground 5"
- (G) Discharge angle (7' dump ht.) 66°
- (H) Discharge angle (max. lift) 45°
- (J) Grading angle (ground level) 90°

HYDRAULIC CYLINDERS

- Loader lift (2): 3" x 31 1/2" — 1 1/2" rods
- Loader dump (2): 2 1/2" x 18 3/8" — 1 1/4" rods
- Boom: 3 1/2" x 35" — 1 3/4" rod
- Dipper stick: 4" x 26 1/8" — 2" rod
- Bucket: 3 1/2" x 27 1/4" — 1 3/4" rod
- Swing (2): 2 1/2" x 16 1/2" — 1 1/4" rods
- Stabilizers (2): 3" x 9" — 1 1/2" rods

BACKHOE SPECIFICATIONS

- (K) Digging reach (from axle) 18'7"
- (L) Digging radius (from pivot) 16'2"
- (M) Digging depth 12'6"
- (N) Dump reach (max. lift) 11'6 1/2"
- (P) Dump height (start) 10'7"
- (Q) Dump height (end) 15'0"
- (R) Overall height (max. lift) 15'6"

HYDRAULIC SYSTEM

Cylinder design and packing: Sturdy, easy-to-service Case design, with removable cylinder heads securely joined by 4 high-strength external thru-bolts. Rods equipped with chevron packing to positively hold pressures.

Controls: Four-position, double-spool valve with positive-hold "float" position; built-in relief; mounted for right-hand operation of loader. Heavy-duty 6-spool valve with individually replaceable spools and bodies provides precise operation of backhoe, boom, crowd, bucket and stabilizer cylinders. Foot pedals control backhoe swing with feathered action and cushioned stops. Primary relief setting at 1500 psi.

Pump: Tractor-mounted, direct-drive, gear-type, 21 gpm capacity @ 2000 rpm.

Hydraulic lines: Steel tubing with brazed fittings, and double wire-braid high-pressure hose with swaged fittings.

IMPORTANT: J. I. Case Company reserves the right to change these specifications without notice and without incurring any obligations relating to such changes.

Sold and Serviced by: