



580 B Construction King

Choice of 3 Case-built engines — gas or diesel.

Choice of hydrostatic drive, or 4-speed transmission with torque converter, or 8-speed with synchronized shuttle.

14-1/2' backhoe or 14-1/2' to 18-1/2' telescoping Extendahoe.

4000 lbs. Hydra-leveling® Loader

Features

Basic Tractor — available in 5 engine-transmission combinations: Case-built 188 cu. in. diesel with 4-speed transmission and power shuttle — hydrostatic drive or 8-speed with synchronized shuttle. 188 cu. in. gas with 4-speed transmission and power shuttle. 159 cu. in. gas with dry clutch, 8-speed transmission and synchronized shuttle.

Three transmissions are available to match your requirements: hydrostatic drive provides smooth acceleration and maximum torque without shifting at all speeds from 0 to 18 mph — maintains full crowding power and hydraulic power. Full power shuttle 4-speed transmission with torque converter matches engine speed to load, automatically — provides fast shuttling by moving a hand lever — no clutching — torque converter gives maximum crowd and torque multiplication. 8-speed transmission with synchronized shuttle minimizes investment, provides right speed for the job.

Foot operated differential lock — lets operator make both wheels turn at equal speed for maximum traction.

Adjustable, turn-around seat for loader and backhoe operation.

Backhoes — Choice of 14 1/2' backhoe or 14 1/2' to 18 1/2' hydraulic telescoping Extendahoe. Both feature famous Case-built Construction King design, with strength, ruggedness and versatility to handle the broadest range of excavating jobs.

Twin boom cylinders provide extra craning ability, resist flexing.

Boom racks back to over-center transport position, shifting weight forward for greater stability.

Multi-position stabilizers provide maximum stability, can be positioned individually so operator can dig 180°, right up to machine. 9'9" (2972 mm) stabilizer spread.

Offset operator sees his work better, produces more.

Extendahoe telescopes hydraulically from 14 1/2' to 18 1/2' for extra dig depth, extra reach, more loading height, digging square holes, undercutting, craning and making fewer moves.

Optional Hydra-Guide automatically controls the backhoe curl, dig, lift cycle. Operator dials "dig", pulls the dipper control lever and bucket automatically fills itself. Operator dials "trench", and bucket levels bottom of trench.

Fast, accurate 180° swing. A choice of three-lever and foot swing or dual-lever hand control for

operation of swing, boom crowd and bucket action. Hydraulic cushioning smoothly stops the boom on full swings.

Loader — lifts 4000 lbs. Exclusive Hydra-leveling keeps the bucket level from ground to full lift automatically. No load spillage. Force multiplying power linkage provides exceptional breakout, bucket rollback, grading angle. When grading or dozing, bucket cylinders are fully retracted. No rod deflection.

Single lever controls all loader functions — bucket rollback, dump, lift, lower.

Return-to-dig returns the bucket to its proper digging position after the load is dumped.

Flat, clean deck — sloped hood design — hydrostatic power steering for operator comfort, efficiency. Cab with built-in ROPS, ROPS canopy available.

Mod 3-point Hitch System — self-contained module quick-mounts on backhoe frame, lets you attach landscaper or other 3-point hitch tools in seconds.

Unit shown is equipped with non-standard items. Manufactured by J I Case Company, Racine Wisconsin USA



J I Case
A Tenneco Company



Specifications

580B Drawbar Tractor

Construction King

Engine

	Diesel	Gas	Gas
* Make and model	Case G188D diesel	Case G188B gas	Case G159B gas
* Fuel	No. 2 diesel	Gas, regular	Gas, regular
* Number of cylinders	4	4	4
* Bore and stroke	3-13/16" x 4-1/8" (97 mm x 105 mm)	3-13/16" x 4-1/8" (97 mm x 105 mm)	3-1/2" x 4-1/8" (89 mm x 105 mm)
* Displacement	188 cu. in. (3018 cm ³)	188 cu. in. (3018 cm ³)	159 cu. in. (2606 cm ³)
* Electrical system	12V	12V	12V
Battery (90 sec. diesel rating)	300 amps	300 amps	300 amps
Compression ratio	17.5 to 1	7.34 to 1	7.42 to 1
Fuel induction	Injectors	Up-draft carburetor	Up-draft carburetor
Fuel supply	Injection pump	Gravity	Gravity
Air cleaner	Dry type-replace. element	Dry type-replace. element	Dry type-replace. element
Oil filter - full flow	Replac. cartridge	Replac. cartridge	Replac. cartridge
Lubrication	Positive pressure	Positive pressure	Positive pressure
Cooling system	Pressurized - 4 psi (0,28kg/cm ²)	Pressurized - 4 psi (0,28 kg/cm ²)	Pressurized - 4 psi (0,28 kg/cm ²)
Horsepower	Power shuttle & hydrostatic	Power shuttle	Dry clutch
(1) Mfg. rated	57@2100 rpm	57@2100 rpm	48@1900 rpm
* (2) SAE net	50@2100 rpm	50@2100 rpm	43@1900 rpm
(1) Mfg. rated	48@1900 rpm		48@1900 rpm
* (2) SAE net	43@1900 rpm		43@1900 rpm

	Power shuttle & hydrostatic	Power shuttle	Dry clutch
Maximum torque, ft-lb (m-kg)	142@1400rpm (19.6)	154@1300 rpm (21.3)	132@1250 rpm (18.3)
(1) Mfg. rated	132@1400rpm (18.3)	144@1300rpm (19.9)	122@1250 rpm (16.9)
* (2) SAE net	135@1400 rpm (18.7)	132@1250 rpm (18.3)	125@1400 rpm (17.3)
(1) Mfg. rated			122@1250 rpm (16.9)
* (2) SAE net			

- (1) Manufacturer's rating of maximum engine horsepower or torque at flywheel when equipped with oil and water pumps. Fuel set at maximum quantity for this application. Corrected to sea level 29.92" (760mm) Hg. and 60° F. (16° C) dry air.
- (2) SAE net flywheel horsepower or torque of engine as applied to this vehicle when equipped with operating accessories including oil and water pumps, alternator, air cleaner, fan and muffler. Corrected to 500' (152.4 m) altitude with .38" (10 mm) Hg. vapor pressure 29.38" (746 mm) Hg. observed barometer and 85° F. (29° C) per SAE J816a specifications.

Power Train

- Standard transmission: 8-speed sliding spur-gear with dual range lever and synchronized shuttle shift.
- * Optional transmission: 4-speed sliding spur gear with full power shuttle and torque converter.
- * Optional transmission: Hydrostatic, hand or foot controlled in forward or reverse with emergency stop control.
- * Clutch: Foot-operated, mechanical, single plate, dry disc, 11" diameter with Ferrometallic lining (not on converter models).
- * Torque converter: Single-stage hydrokinetic type (2.31 to 1 ratio) - optional.
- * Reversing unit: Standard — synchronized sliding gear (manual) Optional — full power (hydraulic clutches).
- * Brakes: Individual or simultaneous foot-actuated, mechanical, 6-1/2" (165 mm) bands and disc with overcenter type parking brake.

Differential lock optional.

Front Axle Rating

Dynamic	34,000 lbs. (15422 kg)
Static	8,500 lbs. (3856 kg)

Rear Axle Rating

Dynamic	33,000 lbs. (14932 kg)
Static	11,000 lbs. (4999 kg)

Steering

- * Power Steering
- * Turning Ratio (Stop to Stop) Hydrostatic 2-3/4 turns

Capacities

- * Cooling System
- | | |
|------------|---------------------------|
| 159 Engine | 14 qts. (13 liters) |
| 188 Engine | 16-1/2 qts. (15.6 liters) |
- * Fuel Tank 22 gal. (39.3 liters)
- * Engine Lubricating Oil 4 qts. (3.8 liters)

Tractor Operational Data

- * Curb clearance circle diameter - without brakes 21'9" (6629 mm)
- with brakes 21'6" (6553 mm)

Travel Speeds mph (km/h)

Standard: Synchronized shuttle shift transmission with Ferrometallic clutch @ 1900 engine rpm, 14.9 x 24 R1 tires:

	mph (km/h)	mph (km/h)	mph (km/h)	mph (km/h)
Low range	1st	2nd	3rd	4th
Forward	1.7 (2.7)	3.2 (5.1)	3.9 (6.3)	11.4 (18.3)
Reverse	2.1 (3.4)	4.0 (6.4)	4.9 (7.9)	14.2 (22.8)
Direct range	1st	2nd	3rd	4th
Forward	2.7 (4.3)	5.2 (8.4)	6.4 (10.3)	18.4 (29.6)
Reverse	3.3 (5.3)	6.5 (10.5)	7.9 (12.7)	22.8 (36.7)

Optional: Full power shuttle transmission and torque converter @ 2100 engine rpm, 14.9 x 24 R1 tires:

	1st	2nd	3rd	4th
Forward	3.1 (5.0)	5.9 (9.5)	7.2 (11.6)	20.8 (33.5)
Reverse	3.7 (6.0)	7.1 (11.4)	8.6 (13.8)	24.9 (40.1)

Optional: Hydrostatic transmission w/14.9 x 24 R4 rear tires: foot pedals 10 mph (16.2) in forward & reverse; hand control — 18 mph (29.2) forward, 12 mph (19.4) in reverse.

Tractor Dimensions

- * Overall length 9'9" (2972 mm)
- * Overall width 71"-79" (1803-2007 mm)
- With Fixed Disc Rear Wheels (Optional) 77" (1956 mm)
- With Offset Disc Rear Wheels (Optional) 73"-83" (1854-2108 mm)
- Height to exhaust stack 92" (2337 mm)
- * Height to steering wheel 70" (1778 mm)
- * Ground clearance 14" (356 mm)
- * Front wheel tread 54" (1372 mm) to 57" (1448 mm)
- * Rear wheel tread (integral rim) 62" (1575 mm) to 66" (1676 mm)
- * Rear wheel tread (dismountable rim) 60" (1524 mm) to 76" (1930 mm)
- * Wheel base 78-7/16" (1992 mm)
- 188 engine 77-3/16" (1961 mm)
- 159 engine

NOTE: Specifications taken with 7.50 x 16 - 10 PR (I1) rib front tires. 14.9 x 24 - 6 PR (R4) rear tires, and standard equipment unless otherwise specified.

Tractor Approximate Shipping Weights

	Power shuttle and torque converter	Hydrostatic	Dry clutch
Diesel, 188 cu. in.	4015 lbs. (1806 kg)	4170 lbs. (1877 kg)	3895 lbs. (1753 kg)
Gas, 188 cu. in.	3935 lbs. (1771 kg)		
Gas, 159 cu. in.			3595 lbs. (1618 kg)

580 B Tires

Used on all machines

Type	Size	Ply Rating	Tread	PSI	Pressure (kg/cm ²)
Front	7.50x16	10	(II) Rib	56	(3.9)
Front	7.50x16	10	(II) Truck Tread	56	(3.9)
Front	11Lx16	10	(II) Truck Tread	48	(3.4)

Used on all machines without Extendahoe

Rear	14.9x24	6	(R1 & R3) Agricultural	18	(1.3)
Rear	14.9x24	6	(R4) Utility Traction	20	(1.4)
Rear	14.9x24	8	(R4) Utility Traction	24	(1.7)
Rear	16.9x24	6	(R3) Non Directional	18	(1.3)
Rear	16.9x24	6	(R4) Utility Traction	18	(1.3)
Rear	16.9x24	8	(R4) Utility Traction	24	(1.7)
Rear	17.5Lx24	6	(R4) Ind. Sure Grip	16	(1.1)
Rear	17.5Lx24	8	(R4) Ind. Sure Grip	22	(1.5)

Used on machines with Extendahoe

Rear	16.9x24	8	(R4) Utility Traction	24	(1.7)
Rear	17.5Lx24	8	(R4) Ind. Sure Grip	22	(1.5)

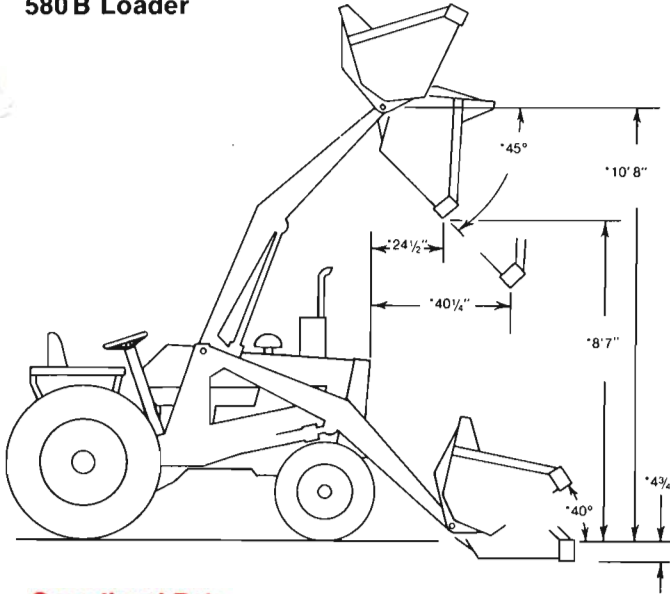
Tractor Standard Equipment

Anti-freeze solution to -20° F. Heavy-duty front axle with fixed tread of 53". Dry type replaceable cartridge air cleaner. Heavy-duty clutch. Swinging drawbar. 12-volt electrical system. Case G159B gas or Case G188D diesel (option) or Case G188B gas engine (optional). Rear fenders. Full flow oil filter. Floor plates. Front wrapper and heavy-duty grille. Gauges and instruments: condition gauge for loader and backhoe hydraulic system filter, converter temperature and clutch hydraulic-pressure gauge (power shuttle tractor), fuel level gauge, temperature gauge, hourmeter, engine speed indicator (tachometer), engine oil pressure warning light, alternator indicator light, air cleaner restriction indicator, instrument panel light. Two shock-mounted headlights and combination rear working and red taillight. Up-right oval muffler with deflector. Electric manifold pre-heater (diesel). Deluxe easy-ride seat. Full time Hydrostatic steering. Hand and foot throttles. 14.9 x 24, 6PR, R4 utility, traction tread rear tires. 7.50 x 16, 10PR, I1 front tires. Tool box. 8-speed mechanical shuttle transmission with clutch. 4-speed power shuttle with torque converter (optional). Hydrostatic transmission (optional). Rear wheels adjustable in 4" increments from 56" to 64".

Optional Equipment

ROPS. Anti-freeze to -40° F. Engine side panels. Lock-up kit. Engine block heater. 3-point hitch. Horn. Combination tail and stop light. Warning light and flasher attachment. Differential lock. Independent PTO. Rear wheel weights. Front end weights. Sideboom, winch, backfill dozer blade. Modular system 3-point hitch.

580 B Loader



Operational Data

*Lift capacity to full height	4000 lbs. (1814 kg)
*Height to bucket hinge pin	10'8" (3251 mm)
*Bucket rollback at ground line	40°
Breakout force, tilt cylinders pivot at bucket hinge pin	6200 lbs (2818 kg)
*Dump angle at full height	45°
*Grading angle	110°
Short Lip	
*Digging depth below ground - bucket flat	4-3/4" (121 mm)
*Dump clearance at full height 45° dump	8'7" (2616 mm)
*Dump reach at full height 45° dump (188 engine)	24-1/2" (622 mm)
(159 engine)	25-1/2" (648 mm)
*Reach - bucket on ground (188 engine)	70-1/2" (1791 mm)
(159 engine)	69-1/4" (1759 mm)
*Raising time to full height	4.2 sec.
Bucket dumping time - bucket empty	1.0 sec.
*Lowering time, power down	3.0 sec.
Return-to-dig	4.2 sec.

Loader Dimensions

*Overall operating height	13'1" (3988 mm)	13'1" (3988 mm)
*Overall length - with C/W	14' 10-3/4" (4540 mm)	14' 10-1/4" (4528 mm)
- with 3 point hitch	15' 4-1/2" (4686 mm)	15' 10" (4826 mm)
*Overall height to top of loader upright	63-1/4" (1607 mm)	63-1/4" (1607 mm)
to top of exhaust stack	92" (2337 mm)	92" (2337 mm)
*Overall width - with C/W or 3 pt. hitch	79-1/4" (2013 mm)	79-1/4" (2013 mm)
*Turning clearance circle - bucket roll back - hinge pin at 3' (914 mm)		
- brake turn	30' 2-1/4" (9201 mm)	30' 7" (9322 mm)
- without brakes	31' 1-1/4" (9481 mm)	31' 6" (9601 mm)
Ground clearance (with 1400 lb. counterweight)	13-1/2" (343 mm)	13-1/2" (343 mm)

Loader Approximate Shipping Weights (less buckets)

NOTE: Weights include loader without bucket - with rear mounting arms - without rear attachments. Each basic machine is with 7.50x16 - 10PR (11) rib front tires and 14.9x24 - 6PR (R4) rear tires.

188D diesel - hydrostatic	6314 lbs. (2864 kg)
188D diesel - power shuttle	6094 lbs. (2764 kg)
188D diesel - dry clutch	5994 lbs. (2719 kg)
188B gasoline engine - power shuttle	6014 lbs. (2728 kg)
159B gasoline - dry clutch	5799 lbs. (2630 kg)
Rear counterweight	add 1400 lbs. (635 kg)

Loader Bucket Sizes

Width inch (mm)	Type	Capacities (SAE) Heaped cu. ft. (m ³)	Struck cu. ft. (m ³)	Weight lbs. (kg)
64 (1626)	Long Lip	20.00 (0.57)	17.51 (0.50)	575 (261)
74 (1880)	Short Lip	21.06 (0.60)	17.81 (0.50)	600 (272)
74 (1880)	Long Lip	23.26 (0.66)	20.33 (0.58)	640 (290)
80 (2032)	Short Lip	22.83 (0.65)	19.34 (0.55)	671 (304)
80 (2032)	Long Lip	25.12 (0.71)	21.96 (0.62)	730 (331)
74-3/4 (1899)	4-in-1	23.84 (0.67)	19.62 (0.56)	1040 (472)

Loader Hydraulic System

- *Hydraulic pump: Positive displacement, gear type
Pump capacity:
Power Shuttle and hydrostatic models - 26 gpm @ 2100 rpm @ 2200 ± 75 psi (98 l/mn @ 2100 tr/mn @ 154.7 ± 5.3 kg/cm²)
Dry clutch models - 24 gpm @ 1900 rpm @ 2200 ± 75 psi (91 l/mn @ 1900 tr/mn @ 154.7 ± 5.3 kg/cm²)
- *Control valve main relief pressure (Loader Valve): 2200 ± 75 psi (Cartridge relief) (154.7 ± 5.3 kg/cm²)
- *Control valve main relief pressure (3-point hitch): 1800 ± 50 psi (126.5 ± 3.5 kg/cm²)
- *Filtration: 40 micron, full-flow replaceable cartridge on return line. Condition indicator gauge for filter.
- *Hydraulic reservoir refill capacity: 11 gallons (5 liters).
- Loader control valves: Mono-cast, two or three spool. Single lever control for lift and tilt. Extra lever for 4-in-1 bucket or grapple. Lift lever has positive hold "float" position and "return-to-dig" feature.
- Loader cylinders:
Lift (2) 3" dia. × 31-1/2" stroke, 1-1/2" rod (76 mm dia. × 800 mm stroke - 38 mm rod)
Tilt (2) 2-1/2" dia. × 20" stroke, 1-1/2" rod (64 mm dia. × 508 mm stroke - 38 mm rod)
Hydra-Leveling (1) 3" dia. × 9-15/16" stroke, 1-1/4" rod (76 mm dia. × 252 mm stroke - 44 mm rod)
Clam (2) 3" dia. × 9" stroke, 1-3/4" rod (76 mm dia. × 229 mm stroke - 44 mm rod)
- Logging Fork Grapple Grapple (1) 2-1/2" dia. × 9" stroke, 1-1/2" rod (64 mm dia. × 229 mm stroke - 38 mm rod)
- Hydraulic lines: steel tubing with brazed or flared fittings and wirebraid, high-pressure hose with crimped, full-flow fittings.

4-in-1 Bucket Operational and Dimensional Data

*Lift capacity to full height	4000 lbs. (1814 kg)
*Height to bucket hinge pin	10'7" (3226 mm)
*Bucket rollback at ground line	40°
*Dump angle at full height	44°
*Grading angle - clam closed	107°
*Digging depth below ground - bucket flat	4" (102 mm)
*Digging depth - using clam	37-1/2" (953 mm)
*Dozing depth - clam open	4" (102 mm)
*Dump clearance at full height - 44° dump - clam dump	10'7" (3226 mm)
- bucket dump	100" (2540 mm)
*Dump reach at full height - 44° dump (188 engine)	28-1/2" (724 mm)
(159 engine)	27-1/4" (692 mm)
*Breakout force, tilt cylinders - pivot at bucket hinge pin	5450 lbs. (2472 kg)
*Reach - bucket on ground (188 engine)	74" (1880 mm)
(159 engine)	73-3/4" (1873 mm)
*Raising time to full height	4.2 sec.
Bucket dumping time	1.0 sec.
*Lowering time, power down	3.0 sec.
*Overall operating height	13'4" (4064 mm)
*Overall length - with counterweight	15' 2-1/2" (4636 mm)
- with 3 point hitch	15' 8-1/4" (4782 mm)
- with standard backhoe in transport	21' 8-1/2" (6617 mm)
- with 4' (1219 mm) extendahoe in transport	22' 2-1/2" (6769 mm)
*Overall width - with backhoe	80" (2032 mm)
- with c/w or 3 point hitch	79-1/4" (2013 mm)
*Overall height to top of loader upright	63-1/4" (1607 mm)
to top of exhaust stack	92" (2337 mm)
*Turning clearance circle - brake turn	30' 1" (9169 mm)
- without brakes	31' (9449 mm)
*Ground clearance (with 1400 lb. counterweight)	13-1/2" (343 mm)
Width of dozer cutting edge	73-1/4" (1861 mm)
Maximum clam opening	37-1/2" (953 mm)
Moldboard height	36" (914 mm)
Bucket cutting edge	74" (1880 mm)

NOTE: Specifications taken with 7.50 × 16 - 10 PR (11) rib front tires, 14.9 × 24 - 6 PR (R4) rear tires, 4-in-1 bucket and standard equipment unless otherwise specified.

Loader Model Standard Equipment

All tractor standard equipment plus Loader (less bucket) and hydraulic system complete. Hydra-leveling. Single lever control. Return-to-dig. Bucket position gauge.

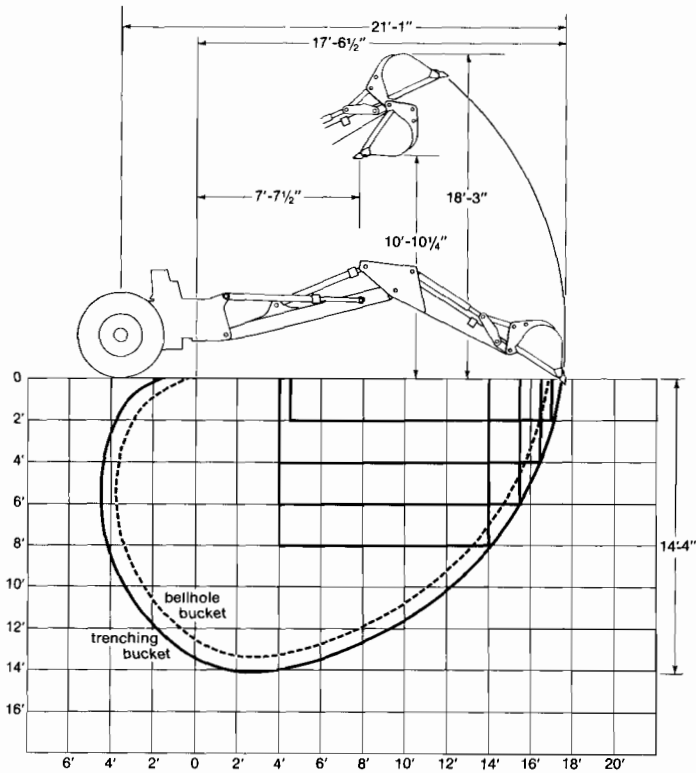
Loader Model Optional Equipment

All tractor optional equipment plus rear counterweight (permanent or quick-disconnect). Rear weight box. Bucket teeth. Dozer blade. Pallet forks. Pallet forks with grapple. Log fork with grapple.

Optional Landscaper Equipment

Case-Danuser landscaper's blade. Case agricultural equipment. Side, rear rotary and sickle bar mowers. Rake. Scarifier-scraper.

14-1/2' Backhoe



580B Construction King with Loader and 14-1/2' Backhoe Operational Data

* Overall reach from rear axle centerline	21'1" (6426 mm)
* Digging radius from swing pivot	17'6-1/2" (5347 mm)
* Digging depth - IEMC	14" (4267 mm)
- Mfg.	14'4" (4369 mm)
* Loading height - boom at 67°	10'10-1/4" (3308 mm)
* Loading reach - boom at 67°	7'7-1/2" (2324 mm)
* Swing arc	180°
* Bucket rotation - #1 position	167°
- #2 position	149°
Stabilizer spread in operating position	
- angled	9'1" (2729 mm)
- straight	9'9" (2972 mm)
* Stabilizer spread in transport position	
- angled	80" (2032 mm)
- straight	89-3/4" (2280 mm)
Stabilizer angle from straight position	20°
* Digging force, bucket cylinder	9400 lbs. (4264 kg)
Digging force, dipper cylinder	6058 lbs. (2748 kg)
* Leveling angle (maximum grade on which the backhoe will make a vertical cut)	
- stabilizers angled	11°
- stabilizers straight	15°

14-1/2' Backhoe Dimensions

* Overall height, maximum	18'3" (5563 mm)
* Transport height	11'2-1/2" (3416 mm)
Overall width - travel position	
- stabilizers angled	80" (2032 mm)
- stabilizers straight	89-3/4" (2280 mm)
Overall length, loader bucket on ground and backhoe in transport	
- short lip bucket	21'4-1/2" (6515 mm)
- long lip bucket	21'10" (6655 mm)
- 4-in-1 bucket	21'8" (6604 mm)
Ground clearance at backhoe	11-1/4" (286 mm)

580B with 14-1/2' Backhoe Approximate Shipping Weights (less buckets)

188D diesel - hydrostatic	9739 lbs. (4418 kg)
188D diesel - power shuttle	9519 lbs. (4318 kg)
188D diesel - dry clutch	9419 lbs. (4273 kg)
188B gas - power shuttle	9439 lbs. (4382 kg)
159B gas - dry clutch	9224 lbs. (4184 kg)

NOTE: Specifications taken with 24" (610 mm) trenching bucket, 74" (1880 mm) short lip loader bucket, 7.50 x 16 - 10 PR (1L) rib front tires, 14.9 x 24 - 6 PR (R4) rear tires and standard equipment unless otherwise specified.

580 B Backhoe Hydraulic System

One basic hydraulic system serves both loader and backhoe. For complete details, see loader section.

Backhoe cylinders:

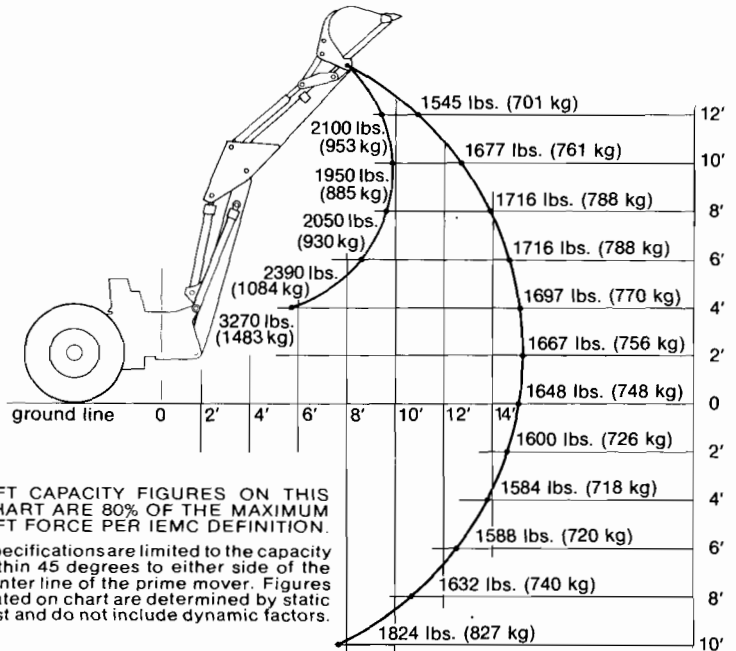
Stabilizer (2)	3-1/2" dia. x 19-13/32" stroke, 2" rod (89 mm dia. x 503 mm stroke - 51 mm rod)
Swing (2)	4" dia. x 11-7/32" stroke, 2" rod (102 mm dia. x 285 mm stroke - 51 mm rod)
Boom (2)	3-1/4" dia. x 41-29/32" stroke, 1-3/4" rod (83 mm dia. x 1064 mm stroke - 44 mm rod)
Dipper (1)	4" dia. x 35-1/8" stroke, 2" rod (102 mm dia. x 892 mm stroke - 51 mm rod)

Backhoe controls: Sectional valve with four spools - boom, dipper, bucket and swing. Foot swing or hand swing (optional), regeneration and hydraulic cushioned swing stops.

Mono-cast, two spool valve for stabilizers with pilot check valves.

Backhoe Buckets

Width inch (mm)	Type	Weight lbs. (kg)
12 (305)	Trenching	210 (95 kg)
18 (457)	Trenching	240 (109 kg)
24 (610)	Trenching	270 (122 kg)
30 (762)	Trenching	330 (150 kg)
36 (914)	Trenching	350 (159 kg)
24 (610)	HD Trenching	435 (197 kg)
30 (762)	HD Trenching	500 (227 kg)
36 (914)	HD Trenching	565 (256 kg)
12 (305)	Bellhole	133 (60 kg)
16 (406)	Bellhole	160 (73 kg)
30 (762)	Bellhole	225 (102 kg)
36 (914)	Bellhole/Graveyard	270 (122 kg)



*LIFT CAPACITY FIGURES ON THIS CHART ARE 80% OF THE MAXIMUM LIFT FORCE PER IEMC DEFINITION.

Specifications are limited to the capacity within 45 degrees to either side of the center line of the prime mover. Figures stated on chart are determined by static test and do not include dynamic factors.

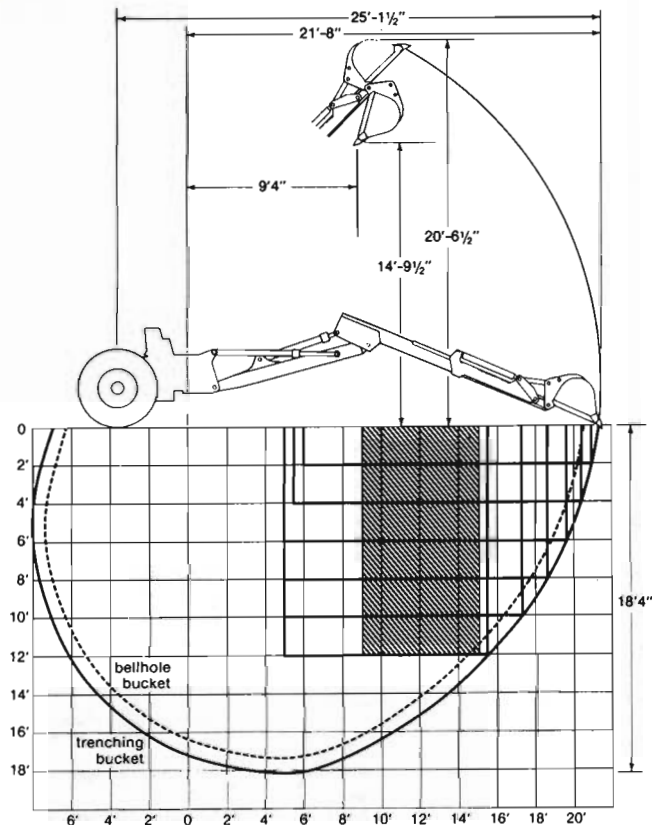
14-1/2' Backhoe Standard Equipment

All tractor standard equipment with offset disc in lieu of adjustable rear wheels (no drawbar). Model 35 Loader (less bucket) with Hydra-leveling, single lever control, return-to-dig and bucket position gauge. Model 35 Backhoe (less bucket) with quick-disconnect mounting and single, turn around seat. Cleated stabilizers. Complete hydraulic system including three-lever foot swing backhoe control.

14-1/2' Backhoe Optional Equipment

All tractor and loader optional equipment plus frost point ripper tooth. Dual-lever backhoe controls in lieu of foot swing. Exclusive Case dipper light. Stabilizer cylinder guards. Street-cemetery stabilizer pads. Rubber pads. Heavy-duty backhoe teeth. Front counterweight. Hughes hydraulic impactor.

14½' - 18½' Extendahoe



580B Telescoping Hydraulic 14-1/2' to 18-1/2' Extendahoe

Hydraulic Extendahoe Operating Data

	Retracted	Extended
* Digging depth - IEMC	14' (4267 mm)	18' (5486 mm)
* Overall reach from rear axle centerline	21'3" (6477 mm)	25'1-1/2" (7658 mm)
* Digging radius from swing pivot	17'9-1/2" (5423 mm)	21'8" (6604 mm)
Loading height - boom at 75°	12'9" (3886 mm)	14'9-1/2" (4509 mm)
Loading reach - boom at 75°	7'1" (2159 mm)	9'4" (2845 mm)
* Bucket rotation - #1 position	152°	152°
- #2 position	137°	137°
* Swing arc	180°	180°
* Stabilizer spread in operating position		
- angled	9'1" (2769 mm)	9'1" (2769 mm)
- straight	9'9" (2972 mm)	9'9" (2972 mm)
Stabilizer angle from straight position	20°	20°
* Digging force, bucket cylinder	9400	9400
	4264 lbs. (2652 kg)	4264 lbs. (1904 kg)
* Digging force, dipper cylinder	5847 lbs. (2652 kg)	4329 lbs. (1904 kg)
* Leveling angle (maximum grade on which the backhoe will make a vertical cut)		
- stabilizers angled	11°	11°
- stabilizers straight	15°	15°

Hydraulic Extendahoe Dimensions

Overall height maximum	20'6-1/2" (6261 mm)
* Transport height	11'9-1/2" (3594 mm)
Overall width - travel position	
- stabilizers angled	80" (2032 mm)
- stabilizers straight	89-3/4" (2280 mm)

Overall length, loader bucket on ground and backhoe in transport	21'10-1/2" (6668 mm)
- short lip bucket	22'4" (6807 mm)
- long lip bucket	22'2" (6756 mm)
- 4-in-1 bucket	10-3/4" (273 mm)
Ground clearance at backhoe	10-3/4" (273 mm)

NOTE: Specifications taken with 24" (610 mm) trenching bucket, 74" (1880 mm) short lip loader bucket, 7.50 x 16 — 10 PR (11) rib front tires, 17.5L x 24 — 8 PR (R4) rear tires, front 700 lb. (318 kg) counterweight and standard equipment unless otherwise specified.

*Hydraulic Extendahoe Approximate Shipping Weights (less buckets)

188D diesel — hydrostatic	10,934 lb. (4960 kg)
188D diesel — power shuttle	10,714 lb. (4860 kg)
188D diesel — dry clutch	10,614 lb. (4814 kg)
188B gas — power shuttle	10,634 lb. (4823 kg)
159B gas — dry clutch	10,219 lb. (4635 kg)
4' Extendahoe only	3,920 lb. (1778 kg)
Front counterweight for Extendahoe	700 lb. (318 kg)

Extendahoe Hydraulic System

See loader section for details.

Backhoe cylinders

Backhoe	3-1/2" dia. x 19-13/32" stroke, 2" rod (89 mm dia. x 503 mm stroke - 51 mm rod)
Stabilizer (2)	4" dia. x 11-7/32" stroke, 2" rod (102 mm dia. x 285 mm stroke - 51 mm rod)
Swing (2)	3-1/4" dia. x 41-29/32" stroke, 1-3/4" rod (83 mm dia. x 1064 mm stroke - 44 mm rod)
Boom (2)	4" dia. x 35-1/8" stroke, 2" rod (102 mm dia. x 892 mm stroke - 51 mm rod)
Dipper (1)	3-1/2" dia. x 39-9/16" stroke, 2" rod (89 mm dia. x 1005 mm stroke - 51 mm rod)
Bucket (1)	3" dia. x 48" stroke, 1-1/2" rod (76 mm dia. x 1219 mm stroke - 38 mm rod)
Dipper Extension (1)	

NOTE: data taken with 74" short lip loader bucket and 24" backhoe trenching bucket.

Extendahoe Standard Equipment

All tractor standard equipment with offset disc in lieu of adjustable rear wheels (no drawbar). Loader (less bucket) with Hydra-leveling single-lever control, return-to-dig and bucket position gauge. Hydraulic telescoping Extendahoe (less bucket). Complete hydraulic system including three-lever foot swing backhoe control. Quick-disconnect system including three-lever foot swing backhoe control. Quick-disconnect mounting. Single, turn around seat. Cleated stabilizers. Front counterweight.

Extendahoe Optional Equipment

Same as 14-1/2' backhoe.

3-point

Mod Hitch Operational Data

Lift (1)	3" dia. x 8-13/32" stroke, 1-1/2" rod (76 mm dia. x 214 mm stroke - 38 mm rod)
Tilt (1)	2-1/2" dia. x 6-5/16" stroke, 1-1/4" rod (64 mm dia. x 160 mm stroke - 32 mm rod)
Pitch (1)	2-1/2" dia. x 7" stroke, 1-1/4" rod (64 mm dia. x 178 mm stroke - 32 mm rod)

Mod Hitch Hydraulics

3-point Hitch: Sectional valve with four spools - lift, tilt, pitch and auxiliary. This is a pressure compensated valve with a detented "float" position in the lift spool. The main relief valve in this valve is adjusted lower than loader system pressure.

Mod Hitch Approximate Shipping Weights

Rear counterweight	1400 lbs. (635 kg)
3-point hitch	645 lbs. (293 kg)

*These specifications conform to IEMC definitions. IEMC definitions are not established for specifications not preceded by an *.

Important

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

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14½' to 18½' telescoping Extendahoe multiplies versatility



Hydra-Leveling loader keeps paydirt moving



Mod 3-point hitch for faster, precise work



Hydra-Guide gets full bucket every pass

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