



SPECIFICATIONS

Loader/Backhoe 590 turbo



The hardworking market leader.

The best. That's what Case has achieved with the 590 turbo. The best model in the 15 foot class with more engine power, greater lift capacity, longer backhoe reach and deeper dig depth than the competition. No matter what the application, whether it's utility or construction, the 590 turbo outperforms any other machine in its class.

The 590 turbo is ideal for sewer and water projects, concrete demolition, tank placement and removal, pipe laying and highway construction.

When you need the power and performance of a large backhoe with the versatility and maneuverability of a smaller machine, invest in the best...a Case 590 turbo.





When it comes to backing up product with warranties, nobody does it better than Case. That's because we build quality and performance into everything we make. It's our philosophy, our way of doing business.

And the same holds true for product support at any of the hundreds of Case dealerships across the country. Case has one of the best dealer support service and maintenance systems in the industry. You're assured of fast, reliable service with genuine Case replacement parts for less downtime and increased productivity. That's our commitment to you.



OPERATOR ENVIRONMENT

The 590 turbo is the loader/backhoe of choice for operator comfort and control – from the panoramic visibility to the specially designed suspension seat and easy access controls.

- Window size, shape, and location are designed to provide maximum visibility for all work and transport functions.



- Easy to operate, durable suspension seat with adjustable height and weight controls lessens operator fatigue.
- Optimal legroom between the seat and ROPS post allows easy operator movement between the loader and backhoe controls.
- Efficient cooling and heating with six louvers in the cab can be turned on and off, directing air throughout the cab.
- Maximum insulation for temperature and sound control.
- Heavy-duty all steel cab roof for safety. Easy mounting antenna and beacon.

- Transmission control on the right side of the console is within easy reach. The T-handle shifter has a clutch disconnect button located on the end of the handle to shift gears with ease, increasing tractor response and productivity.
- Power shuttle lever is mounted on the steering column for hands-on forward and reverse operation.
- Low lever effort reduces operator fatigue and enhances metering for precision backhoe and loader performance.
- A long roof overhang plate acts as a rain deflector when rear window is open. Work lights are located in steel brackets on the front and rear of the cab for protection from branches and other obstacles.
- Operator warning system monitors vital system functions and alerts the operator with an audible alarm and visual indicator if a problem occurs. The system also tells the operator if the parking brake is applied while the forward/reverse lever is engaged.
- Gauges and warning lights:
Converter oil temperature - Engine coolant temperature - Fuel - Tachometer/hourmeter - Voltmeter - Alternator - Engine oil pressure - Hydraulic system filter - Transmission oil filter - Air cleaner - Brake fluid level



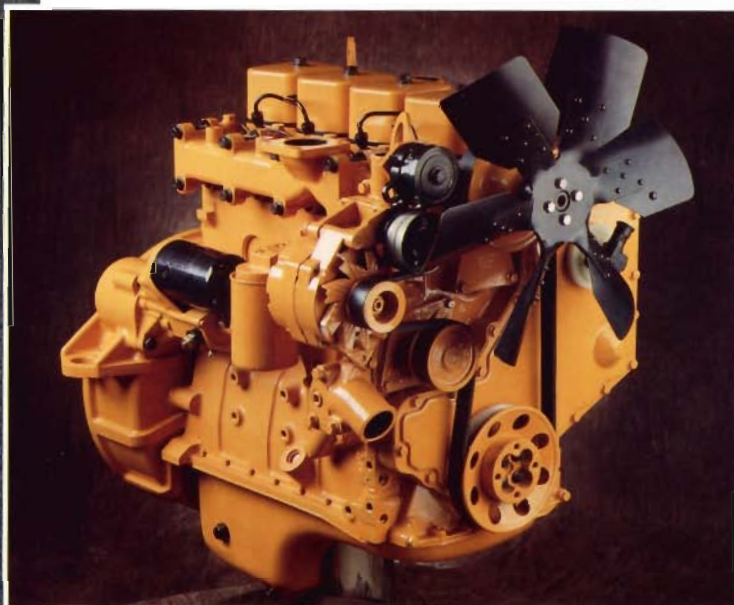


- Two lever and three lever backhoe controls are available to match the operator's preference. A three lever control pattern for the boom, dipperstick and bucket includes a foot swing. The swing and the three backhoe functions are combined in the two lever wobblestick hand control pattern. The Extendahoe is controlled by a fourth lever on the three lever pattern or by a foot control on the two lever wobblestick pattern.





Time has proven the Case 4T-390 diesel engine to be both reliable and efficient. Designed specifically for heavy equipment applications with high torque lugging ability, the 590 turbo produces all day, every day.



- The turbocharged 4T-390 engine offers increased horsepower and high altitude compensation for outstanding performance.
- Integral design of the oil and coolant pumps incorporates components into the engine block. Heat buildup and wear are reduced because of fewer moving parts. Fewer parts to replace means low operating cost and quick maintenance.
- State-of-the-art one-piece cast iron parent metal bore block eliminates cavitation erosion and coolant leaks in the cylinder bore for increased ring and piston life.
- Integral oil pump and under piston oil nozzles provide positive cylinder wall lubrication and cooling. Deep sump provides oil lubrication when operating on slopes up to 45° in all directions.
- 2 year/2,000 hour parts and labor warranty backs the performance and durability of this outstanding engine.

ModelCase 4T-390
Cylinders4
Bore/Stroke-in4.02 x 4.72 (102 x 120 mm)
Displacement-in³239 (3.92 L)
Horsepower (turbo)*
 Gross93 (69 kW) @ 2200 rpm
 SAE Net86 (64 kW) @ 2200 rpm
Maximum torque ft-lb
 Gross253 (344 Nm) @ 1600 rpm
 Net244 (331 Nm) @ 1600 rpm

*Gross engine horsepower or torque at flywheel per SAE J1349

TRAVEL SPEEDS mph (km/h)

	Forward	Reverse
1st	3.7 (6.0)	4.4 (7.2)
2nd	6.2 (9.9)	7.4 (11.9)
3rd	14.1 (22.7)	16.8 (27.1)
4th	24.7 (39.9)	29.6 (47.8)

Note: Engine at full throttle,
19.5L x 24, 10PR rear tires.



DRIVELINE

Whether you're roading or on the job working the loader, the 590 turbo offers you smooth, high performance operation either shifting on-the-go or shuttling back and forth.

- Fully synchronized 4-speed forward/reverse shuttle transmission with hydraulically actuated clutches and clutch disconnect button allows quick response to changing ground or road conditions.
- Modulation in the shuttle shift produces smooth directional changes and faster cycle times to improve productivity.
- Single stage torque converter with 2.63 to 1 stall ratio reduces shock loads placed on powertrain components by automatically adjusting torque to handle heavy workload conditions at peak engine efficiency.

TIRE SIZE

Rear	19.5L x 24	
Front	11L x 16	2WD
	12 x 16.5	4WD



- The shuttle transaxle incorporates the inboard planetary drives for reduced gear loading in severe loader applications.
- Maintenance-free, self-adjusting, inboard mounted, wet disc brakes are hydraulically actuated. They can be operated individually for pivot turns, or simultaneously for normal braking.
- The automatic warning system alerts the operator if the parking brake is applied while the shuttle lever is engaged.
- Continuous flow oil cooling to the torque converter, transmission and brakes keeps the powertrain from overheating for extended service life. Full flow replaceable 7-micron cartridge on the return line filters the system.

- Componentized powertrain makes servicing quick and easy for less downtime. Each component can be removed separately without disturbing the remaining parts.
- Front wheel mechanical drive is easily engaged by a lever located on the front control console. The heavy-duty front axle with outboard planetary drive provides added tractive effort for maximum loader push and rough terrain capability.



ELECTRICAL

Voltage12 volts, negative ground
Alternator65 amp
BatteryMaintenance-free, 685 cold cranking amps @ 0° F (-18° C)



BACKHOE

The Case backhoe design offers maximum productivity with minimum operator fatigue.

- The fixed flow, 41 gpm (155 L/min) hydraulic system provides quick response and fast cycle times.
- Open-center design of the hydraulics provides precision control and allows the operator to "feel" with the backhoe.
- Cast ductile iron swing tower and boom provide the maximum in strength and durability because ductile iron provides smooth stress flow throughout the length of the component. The boom carries a 5-year limited warranty.
- A three lever control pattern for the boom, dipperstick and bucket includes a foot swing. The swing and the three backhoe functions are combined in the two lever wobblestick hand control pattern. The Extendahoe is controlled by a fourth lever on the three lever pattern or by a foot control on the two lever wobblestick pattern.
- Boom, dipperstick and bucket each use a single cylinder for improved visibility to the trench – the widest point is 12" (305 mm). Hoses are routed so they don't rub or pull from their housing and can be easily reached for maintenance or repair.
- An 11'1" (3.38 m) wide stabilizer operating stance and front-end loader rollover bucket capability securely stabilizes the machine during backhoe digging operations.
- Over-center backhoe transport position distributes the weight of the hoe toward the front of the tractor for improved overall stability. Over-center design also increases bucket clearance and reduces overall length for moving around restricted job sites.
- Dual cylinder swing system with Case designed sequencing valve provides constant swing torque and precise control.





BACKHOE BUCKET SIZES AND WEIGHTS

	Weight	SAE Heaped Capacity
12" (305 mm) Heavy-duty universal trenching	316 lb (143 kg)	2.90 ft ³ (0.08 m ³)
16" (406 mm) Heavy-duty universal trenching	352 lb (160 kg)	3.60 ft ³ (0.10 m ³)
18" (457 mm) Heavy-duty universal trenching	366 lb (166 kg)	4.30 ft ³ (0.12 m ³)
24" (610 mm) Heavy-duty universal trenching	440 lb (200 kg)	6.40 ft ³ (0.18 m ³)
30" (762 mm) Heavy-duty universal trenching	510 lb (231 kg)	8.65 ft ³ (0.24 m ³)
36" (914 mm) Heavy-duty universal trenching	588 lb (267 kg)	10.80 ft ³ (0.31 m ³)
24" (610 mm) High capacity trenching	446 lb (202 kg)	9.10 ft ³ (0.26 m ³)
30" (762 mm) High capacity trenching	467 lb (212 kg)	11.9 ft ³ (0.34 m ³)

- Case buckets and the quick coupler are designed to give you a full range of working positions for improved productivity in straight wall trenching, spoil retention when loading trucks, and maximum breakout force.
- Case backhoe buckets carry a full one year warranty.
- Standard, quick coupler enables fast, easy bucket or attachment changes by simply removing one pin and rolling out the bucket.
- Hydraulically telescoping Extendahoe lets you dig deeper and reach further to unload. Can be used in its retracted position of 15'6" (4.7 m) or at any point up to its full extension of 19'6" (5.9 m). The Extendahoe offers the ability to dig straight down – a real advantage in street repair because it eliminates tearing up large sections of pavement. The extra reach makes it easier to unload into trucks with high sideboards, reach over obstacles like walls, or to place spoil further

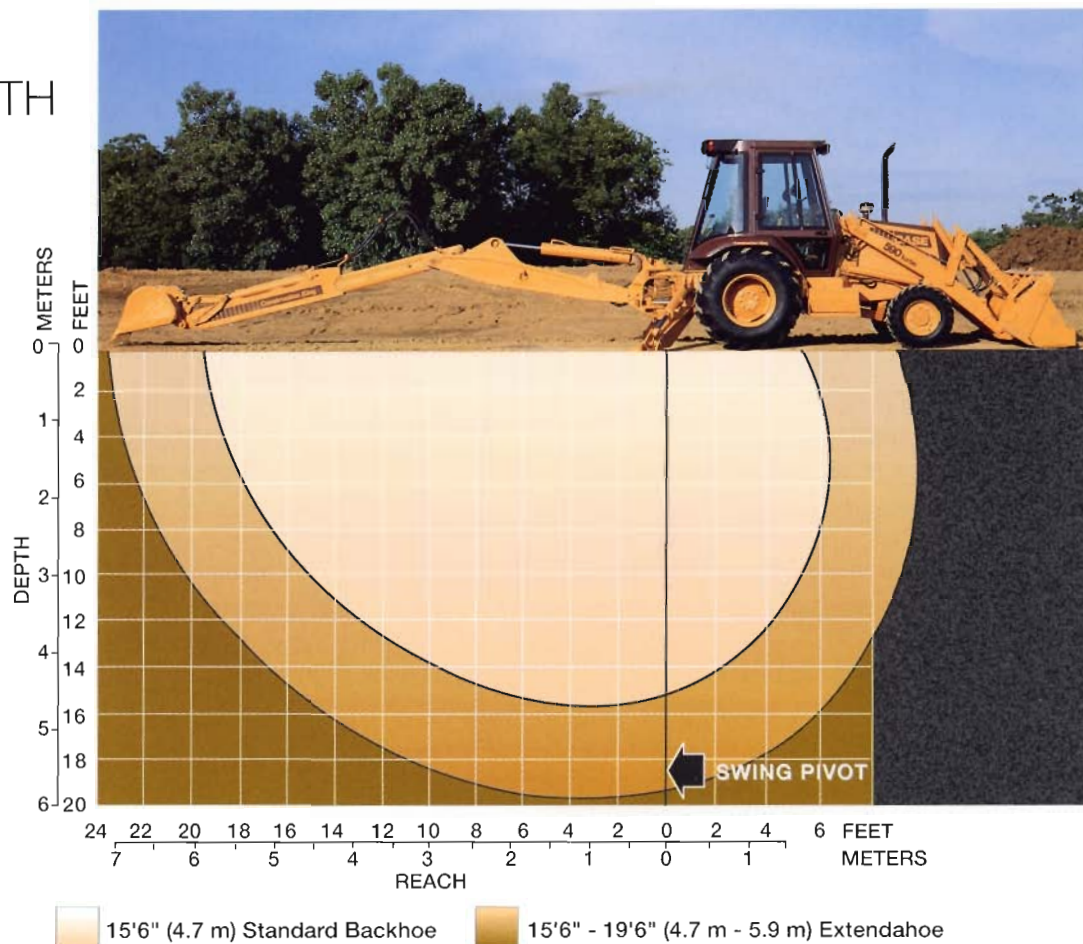
away from the sides of a trench to prevent slides from occurring. It can also reduce the number of times required to reposition a machine.

- Optional stabilizer pads include a cleated dirt pad, a flat cemetery pad with heavy-duty rubber, or a combination flip-over.





DIG DEPTH



OPERATIONAL DATA

	Standard Backhoe	Retracted	Extendahoe [®] Extended
Digging depth —			
SAE, 24" (610 mm) flat bottom	15'6" (4.72 m)	15'6" (4.72 m)	19'6" (5.94 m)
SAE, maximum	15'7.5" (4.76 m)	15'7.5" (4.76 m)	19'7.5" (5.98 m)
SAE, 24" (610 mm) flat bottom (high capacity bucket)	16'0" (4.88 m)	16'0" (4.88 m)	20'0" (6.10 m)
Overall reach from —			
Rear axle centerline	23'2" (7.06 m)	23'2" (7.06 m)	27'1.5" (8.27 m)
Swing pivot	19'7" (5.97 m)	19'7" (5.97 m)	23'6.5" (7.18 m)
Loading height	11'5" (3.48 m)	11'5" (3.48 m)	14'1" (4.30 m)
Loading reach	9'4" (2.84 m)	9'4" (2.84 m)	12'8" (3.88 m)
Swing arc	180°	180°	180°
Bucket rotation —			
#1 position	185°	180°	180°
#2 position	160°	160°	160°
Stabilizer spread —			
Operating position	11'1" (3.38 m)	11'1" (3.38 m)	11'1" (3.38 m)
Transport position	7'2" (2.17 m)	7'2" (2.17 m)	7'2" (2.17 m)
Digging force, bucket cylinder, SAE —			
24" (610 mm) Universal heavy-duty bucket w/coupler	11,500 lbf (51 155 N)	11,500 lbf (51 155 N)	11,500 lbf (51 155 N)
Digging force —			
Dipper cylinder, SAE	7,200 lbf (32 027 N)	7,200 lbf (32 027 N)	4,620 lbf (20 551 N)
Leveling angle —			
(Maximum slope that backhoe will make vertical cut)	12.5°	12.5°	12.5°

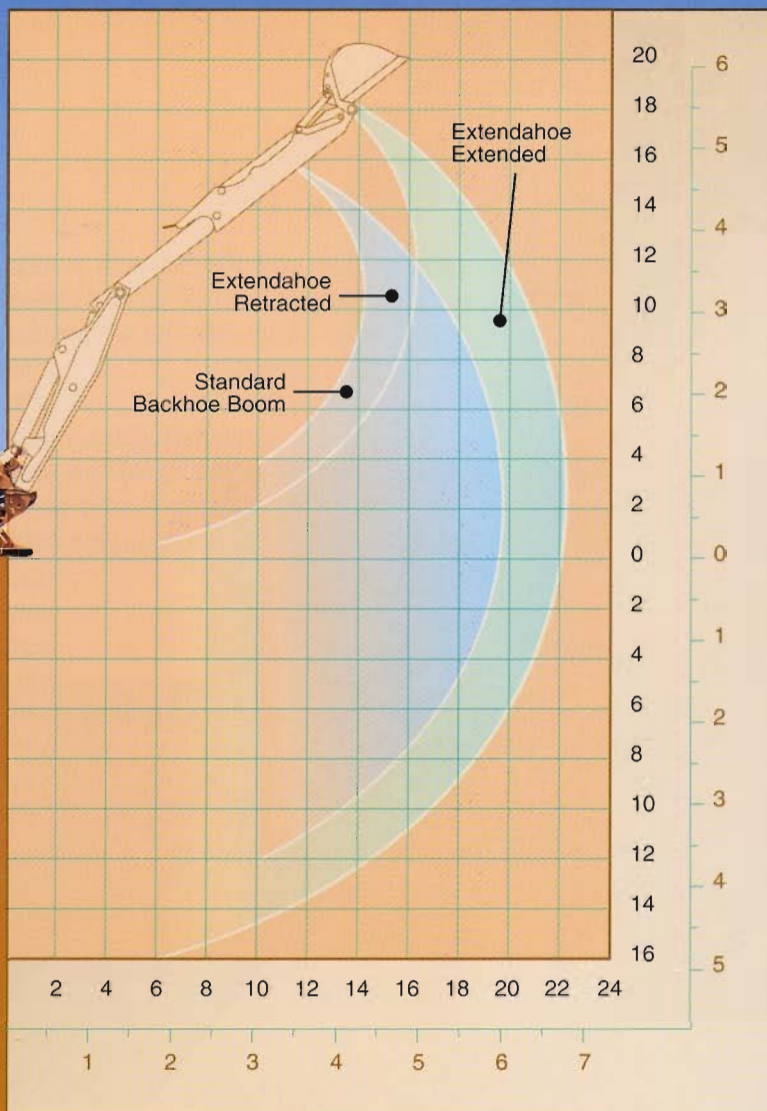


SWING PIVOT



FEET

METERS



LIFT CAPACITIES

1. Lift capacity figures on these charts are 87% of the maximum lift force per SAE Definition J31 and J49 at 2750 psi (18 961 kPa) system relief pressure.
2. Figures stated apply within 45° either side of prime mover.
3. Figures stated are determined by static tests and do not include dynamic factors.
4. Machine is equipped with 24" (610 mm) heavy-duty trenching bucket.
5. Boom is angled at 65° for dipperstick lift capacities.
6. Loader bucket is on ground.

BOOM LIFT

Height Above & Below Ground Level

+18' (5.49 m)
+16' (4.88 m)
+12' (3.66 m)
+ 8' (2.44 m)
Ground Level
- 8' (2.44 m)
-12' (3.66 m)
-16' (4.88 m)

Standard Backhoe

2,540 lb (1152 kg)
3,270 lb (1483 kg)
3,220 lb (1461 kg)
3,000 lb (1361 kg)
2,890 lb (1311 kg)
3,150 lb (1429 kg)

Extendahoe Retracted

2,400 lb (1089 kg)
2,970 lb (1347 kg)
2,960 lb (1343 kg)
2,720 lb (1234 kg)
2,510 lb (1139 kg)
2,790 lb (1266 kg)

Extended

1,720 lb (780 kg)
1,970 lb (894 kg)
2,060 lb (934 kg)
2,070 lb (939 kg)
2,010 lb (912 kg)
1,870 lb (848 kg)
1,940 lb (880 kg)
2,530 lb (1148 kg)

DIPPER LIFT

+10' (3.05 m)
+ 8' (2.44 m)
+ 6' (1.83 m)

4,900 lb (2223 kg)
5,090 lb (2309 kg)
5,170 lb (2345 kg)

4,750 lb (2155 kg)
4,970 lb (2254 kg)
5,040 lb (2286 kg)

2,840 lb (1288 kg)
2,840 lb (1288 kg)
2,880 lb (1306 kg)



More and more, you depend on the front end of your loader/backhoe to perform a variety of tasks. And, you need a front-end loader designed to give you maximum performance and durability – nobody offers you more in a loader than Case.



- Single-lever lift and tilt control with positive hold “float” and return-to-dig position moves with a minimum of lever effort. A second lever controls optional auxiliary hydraulics when operating the 4-in-1 bucket clam or front-end attachments. A valve kit is available for running hand-held tools.
- Return-to-dig feature and forward/reverse shuttle shift shortens overall cycle time for maximum productivity in loader applications. Loader speed is also matched to ground speed for faster work cycles.
- Dual parallel dump cylinders and reverse linkage provide superior breakout force and faster dump time. Reverse linkage allows loader bucket rollover for dozing and added

stability in backhoe applications. When the bucket is in the rollover position, cylinder rods are retracted for protection against the twisting forces of dozing with the loader and digging with the backhoe. The cylinder design provides exceptional visibility to the bucket for grading and truck loading.

- Loader arms and dual dump links support the bucket with 4-point mounting to resist twisting forces when corner loading – also allows materials such as pipe or plywood to be carried across the dump links.
- Lift capacity is rated at 6,700 lb (3039 kg) at full height for the general purpose bucket and 6,630 lb (3007 kg) for the multi-purpose 4-in-1 bucket.
- Maximum dump height and reach makes unloading into trucks easy. A heavy-duty all steel front grille and thick, replaceable bumper guards on the nose cone minimize the chance for front-end damage when approaching trucks to dump.



- Positive hold control position allows the loader to “float” over the ground contour in clean-up applications.
- Automatic self-leveling of the bucket throughout the hoist cycle reduces spillback and maintains control of the load.

- Clutch cutout button on the loader control lever disengages the transmission to give maximum engine horsepower to the loader hydraulics for fast cycle times. Releasing the clutch cutout button returns power to the drivetrain.
- General purpose or 4-in-1 clam buckets are available. General purpose bucket features a heavy-duty reinforced spill guard for dozing, a reinforced bottom and back plate for back dragging and excellent boiling action to fill. Both buckets have lifting points.
- Indicator on the general purpose bucket designates when the bucket is level on the ground. Bucket indicator on the 4-in-1 shows the correct angle when using the bucket as a scraper, loader, dozer, or clam. Another indicator on the clam shows the opening when using the 4-in-1 as a scraper.
- The Case FACT System (Fast Attachment Coupling Team) allows quick changing of attachments for increased machine utilization.



LOADER BUCKET SIZES AND WEIGHTS

	Width	Weight	SAE Capacities	
			Struck	Heaped
General Purpose	90" (2.29 m)	1,100 lb (499 kg)	1.00 yd ³ (0.76 m ³)	1.25 yd ³ (0.96 m ³)
4-in-1®	93" (2.36 m)	1,515 lb (687 kg)	0.88 yd ³ (0.67 m ³)	1.10 yd ³ (0.84 m ³)



HYDRAULICS

Case has spent years perfecting the open center hydraulic system through generations of machine design. The result is a smooth, fast response to control movement and the ability to "feel" objects in precise digging operations.

- Cast iron tandem gear 31 gpm (117 L/min) and 10 gpm (38 L/min) pumps provide positive flow to each circuit. The 31 gpm pump supplies hydraulic oil to the loader. During backhoe operation, the 10 gpm circuit combines with the 31 gpm circuit to provide a total flow of 41 gpm (155 L/min) to the backhoe for fast response time during multi-control functions and improved overall backhoe cycle time.
- Case designed control valves are manufactured specifically for the 590 for precision control.
- Backhoe control valves are easily accessible under the backhoe console for removal when servicing.



- Specially designed hydraulic metering spool on the backhoe hoist circuit makes cutting precision flat bottom trenches easy and also provides excellent controllability when lifting heavy loads.
- All boom, dipperstick and bucket cylinders are easily accessible for inspection and maintenance.
- Easy-access hydraulic oil cooler mounted in front of the engine radiator makes cleaning the coils effortless.

- Auxiliary hydraulic valves are located under the right-hand cab step for quick coupling of hand-held attachments.



Hydraulic pumps.....Front mounted, positive displacement, gear type tandem

Pump capacities:

31 gpm @ 2200 rpm @ 2750 psi
(117 L/min @ 2200 r/min @ 18 961 kPa)
10 gpm @ 2200 rpm @ 2750 psi
(38 L/min @ 2200 r/min @ 18 961 kPa)

Filtration: 7-micron, full flow replaceable cartridge on return line. Condition indicator light for filter. 55 mesh wire screen on inlet side.

LOADER HYDRAULIC SYSTEM

Pump capacity31 gpm @ 2200 rpm @ 2750 psi
(117 L/min @ 2200 r/min @ 18 961 kPa)

Control valve main relief pressure2750 \pm 50 psi
(18 961 \pm 350 kPa)

Loader control valve: 2 or 3-spool sectional valve with single lever control for lift and tilt, optional lever for 4-in-1 bucket clam or auxiliary hydraulics. Lift lever has positive hold "float" position and "return-to-dig" feature.

BACKHOE HYDRAULIC SYSTEM

Pump capacity41 gpm @ 2200 rpm @ 2750 psi
(155 L/m @ 2200 r/min @ 18 961 kPa)

Control valve main relief pressure2750 \pm 50 psi
(18 961 \pm 350 kPa)

Backhoe control valve: 6 or 7-spool, sectional, open center, parallel circuits with regeneration for boom, dipperstick, bucket, swing, two stabilizers and Extendahoe, with pilot checks.

STEERING

- Hydrostatic power steering utilizes on-demand priority flow up to 3.5 gpm (13 L/min) from the main hydraulic 31 gpm (117 L/min) pump.
- 2500 psi (17 238 kPa) operating pressure.
- One (1) double acting steering cylinder with a stop-to-stop turning ratio of 3.6 turns.
- Steering cylinder is located behind the front axle and above the axle pivot for protection against possible damage.

Curb Clearance Circle:

2 WD w/19.5L rear tires	
w/o brakes	25'11" (7.9 m)
w/brakes	19'7" (6.0 m)
4 WD w/19.5L rear tires, w/axle disengaged	
w/o brakes	27'4" (8.3 m)
w/brakes	23'7" (7.2 m)

Front Axle Oscillation:

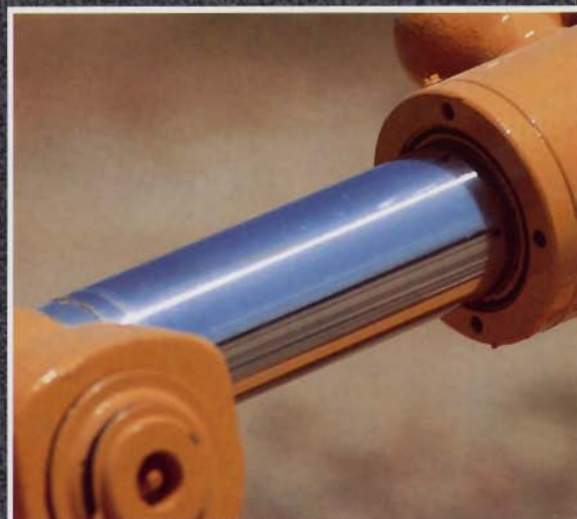
2 WD and 4 WD	20° total (10° each side)
---------------	---------------------------



CYLINDERS

All cylinders are designed and manufactured by Case, the second largest producer of hydraulic cylinders in North America.

Cylinders	Diameter	Stroke	Rod
Loader			
Lift (2)	3.5" (89 mm)	29.1" (739 mm)	1.75" (44 mm)
Tilt (2)	3" (76 mm)	20.6" (522 mm)	1.5" (38 mm)
Clam (2)	3" (76 mm)	9" (229 mm)	1.75" (44 mm)
Backhoe			
Stabilizers (2)	5" (127 mm)	20.9" (530 mm)	2.25" (57 mm)
Swing (2)	3.75" (95 mm)	12" (305 mm)	2" (51 mm)
Boom (1)	5.5" (140 mm)	38.7" (982 mm)	2.5" (64 mm)
Dipperstick (1)	5.5" (140 mm)	22.9" (582 mm)	2.75" (70 mm)
Bucket (1)	3.5" (89 mm)	34.3" (871 mm)	2.5" (64 mm)
Dipperstick ext. (1)	3" (76 mm)	48" (1219 mm)	1.75" (44 mm)
Steering			
2 WD	2.75" (70 mm)	6.7" (170 mm)	1.50" (38 mm)
4 WD	2.48" (63 mm)	9.53" (242 mm)	1.50" (38 mm)



SERVICEABILITY

Serviceability is an important consideration when buying a loader/backhoe. The Case exclusive tilt-up hood and ground line servicing make daily maintenance fast and easy for minimum downtime.



- Easy opening hood allows quick access to the engine for service and maintenance – can be opened from either side of the unit.
- The heavy-duty tilt hood assembly has cylinder assist for low lift effort.
- Heavy-duty, all steel grille is separate from the hood for easy access to the radiator and hydraulic cooler.

- Thick, rubber bumpers mounted directly to the radiator wrapper and grille nose cone protect the hood and maintain alignment of the hood and side panels. Bumpers are easily replaced.
- Bumpers, grille, radiator wrapper, hood and side panels are attached to the tractor frame. Hood and side panels pivot off the lower front corner for easy hood adjustment.

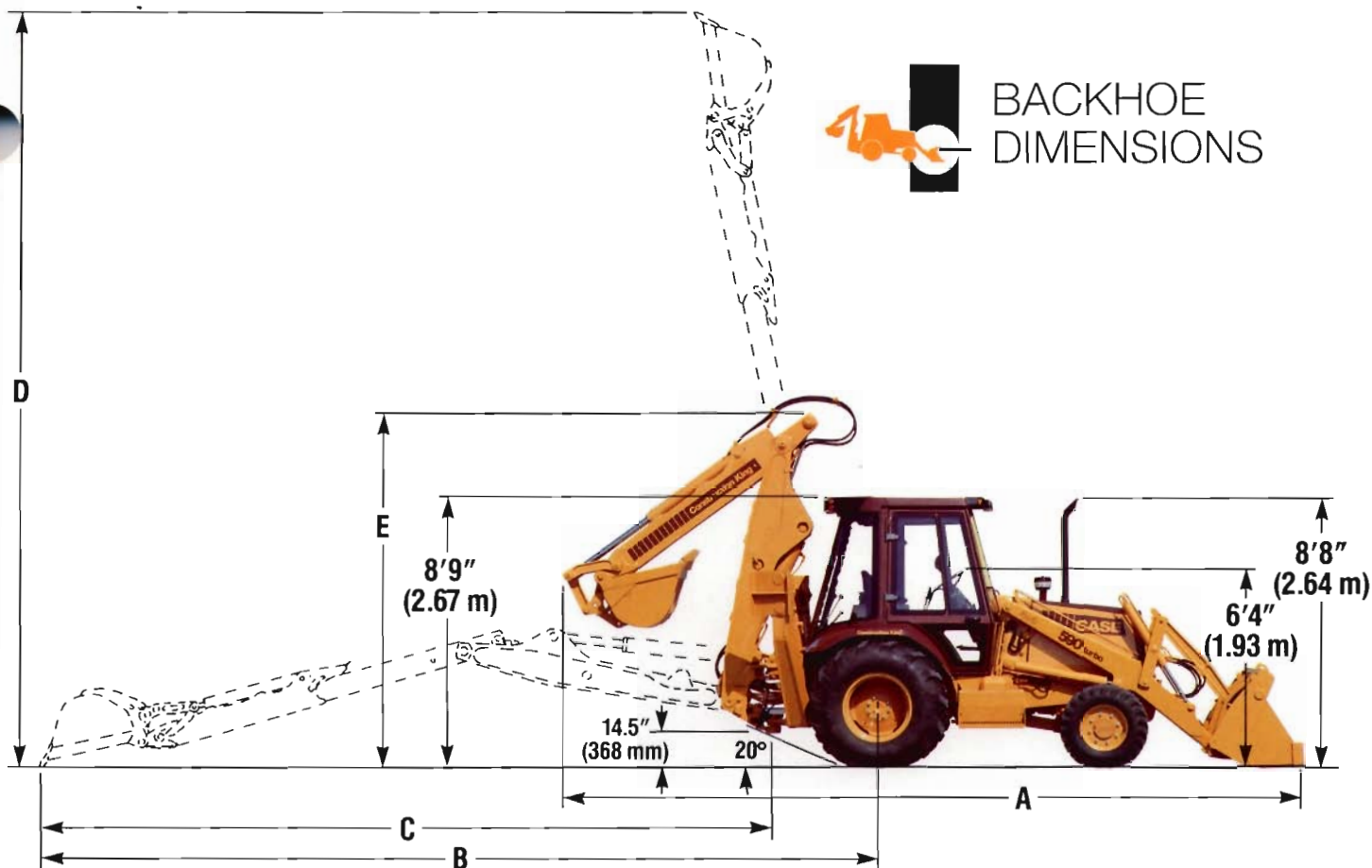


SERVICE CAPACITIES

	U.S.	Liters
Fuel Tank.....	33.0 gal.....	125.0
Hydraulic Reservoir	21.0 gal.....	79.5
Total Hydraulic System	34.0 gal.....	128.7
Transaxle (includes shuttle, transmission, differential, final drives & brakes)	45.4 qt.....	43.0
w/filter	47.6 qt.....	45.0
w/o filter	45.4 qt.....	43.0
total transaxle system	57.1 qt.....	54.0
Engine oil w/filter	11.6 qt.....	11.0
Cooling System		
w/heater	19.5 qt.....	18.5
w/o heater	18.8 qt.....	17.8



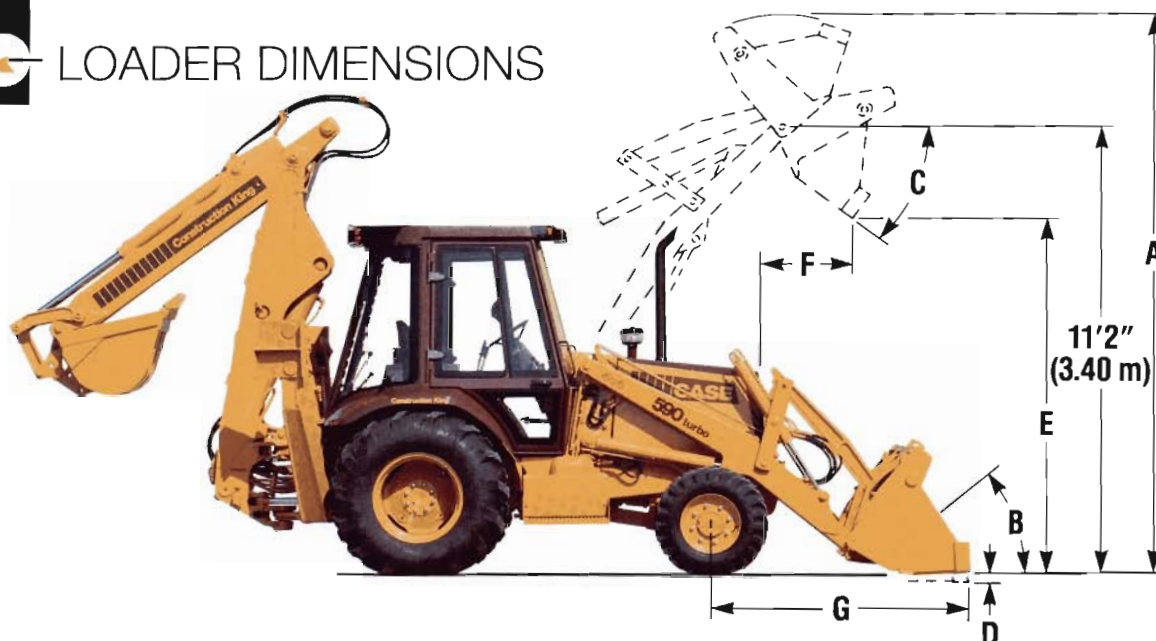
BACKHOE DIMENSIONS



	Standard Backhoe	Retracted	Extendahoe Extended
A- Overall length — transport			
General purpose bucket.....	23'6" (7.16 m)	23'6" (7.16 m)	NA
4-in-1 bucket.....	23'4" (7.11 m)	23'4" (7.11 m)	NA
Overall reach from —			
B- Rear axle centerline.....	23'2" (7.06 m)	23'2" (7.06 m)	27'1.5" (8.27 m)
C- Swing pivot.....	19'7" (5.97 m)	19'7" (5.97 m)	23'6.5" (7.18 m)
D- Overall height, maximum.....	20'11" (6.38 m)	20'11" (6.38 m)	24'10" (7.57 m)
E- Transport height.....	11'6" (3.50 m)	12'2.5" (3.72 m)	NA
Overall width — transport.....	87.5" (2.22 m)	87.5" (2.22 m)	87.5" (2.22 m)
Angle of departure.....	20°	20°	20°
Height —			
To top of canopy.....	8'8" (2.64 m)	8'8" (2.64 m)	NA
To top of cab.....	8'9" (2.67 m)	8'9" (2.67 m)	NA
To top of exhaust stack.....	8'8" (2.64 m)	8'8" (2.64 m)	NA
To top of steering wheel.....	6'4" (1.93 m)	6'4" (1.93 m)	NA
Ground clearance at —			
Tractor transaxle.....	12" (305 mm)	12" (305 mm)	NA
Backhoe frame.....	14.5" (368 mm)	14.5" (368 mm)	NA
Front wheel tread —			
2WD.....	71.5" (1.82 m)	71.5" (1.82 m)	NA
4WD.....	73.5" (1.87 m)	73.5" (1.87 m)	NA
Rear wheel tread.....	67" (1.70 m)	67" (1.70 m)	NA
Wheel base —			
2WD.....	84" (2.13 m)	84" (2.13 m)	NA
4WD.....	84.5" (2.15 m)	84.5" (2.15 m)	NA

Note: Specifications taken with 11L x 16, 10PR front tires (except that data marked 4WD is taken with 12 x 16.5 front tires), 19.5L x 24, 8 PR rear tires, ROPS cab, 14" (4.27 m) backhoe with 24" (610 mm) heavy-duty trenching bucket, loader with 90" (2.29 m) general purpose bucket and standard equipment unless otherwise specified.

LOADER DIMENSIONS



	General Purpose	4-in-1 Bucket
Lift capacity to full height	6,700 lb (3,039 kg)	6,630 lb (3,007 kg)
Height to bucket hinge pin raised	11'2" (3.40 m)	11'2" (3.40 m)
A- Overall operating height	14'0.5" (4.28 m)	14'0.5" (4.28 m)
B- Bucket rollback @ groundline	40°	38°
Breakout force	8,500 lbf (37 810 N)	8,700 lbf (38 700 N)
C- Dump angle @ full height	45°	53°
Maximum grading angle	115°	108°
D- Digging depth below grade —		
Bucket flat	4.2" (107 mm)	6.4" (163 mm)
Clam open (dozing)	NA	1.5" (38 mm)
E- Dump clearance @ full height, 45° dump —		
Bucket	8'10" (2.69 m)	9'2" (2.79 m)
Clam open	NA	10'10" (3.30 m)
F- Dump reach @ full height, 45° dump —		
Bucket	27" (686 mm)	29" (737 mm)
Clam open	NA	15" (381 mm)
G- Reach from front axle centerline,		
bucket on ground	74" (1.88 m)	72" (1.83 m)
Cutting edge width —		
Bucket	90" (2.29 m)	93" (2.36 m)
Dozer (clam open)	NA	92.3" (2.34 m)
Maximum clam opening	NA	37" (940 mm)
Moldboard height	NA	34" (864 mm)
Raising time to full height	5.3 s	5.3 s
Bucket dumping time	1.1 s	1.1 s
Lowering time, power down	2.5 s	2.5 s
Lowering time, return-to-dig	2.6 s	2.6 s

OPERATING WEIGHT

Base Loader/Backhoe: 2WD loader/backhoe, 90" (2.29 m) standard loader bucket, ROPS canopy, 19.5L x 24 rear tires, standard dipperstick, 24" (610 mm) heavy-duty trenching bucket, front 400 lb (180 kg) counterweight, 175 lb (79 kg) operator and full fuel tank

Add:	
4WD	486 lb (220 kg)
Cab	477 lb (216 kg)
4-in-1 Bucket	368 lb (167 kg)
Extendahoe (less counterweight)	480 lb (218 kg)
Extendahoe counterweight	500 lb (227 kg)

590 turbo EQUIPMENT DATA

Standard Equipment

Air cleaner - dry type
 Antifreeze to -34° F
 Audible warning alarm
 Backup alarm
 Fenders: rear wheel
 Front counterweight
 400 lb (180 kg)
 900 lb (408.2 kg) for Extendahoe
 in lieu of 400 lb counterweight
 Full instrumentation
 Hand and foot throttles
 Horn
 Hydraulic actuated brakes
 Hydrostatic steering
 Lights
 2 front, 2 rear flood
 2 rear tail/stop
 2 front and rear flashers/turn
 Lockable neutral start switch
 Pre-cleaner
 Retractable seat belt (2")

ROPS canopy
 Seat
 Tilt engine hood
 Toolbox
 Torque converter drive
 Vandal protection lockup package
 4F/4R power shuttle
 65 amp alternator

BACKHOE
 15'6" (4.7 m) standard backhoe or
 15'6" - 19'6" (4.7 m - 5.9 m) Extendahoe
 Case backhoe bucket coupler
 Cleated stabilizer pads
 Foot swing control

LOADER
 Single lever control w/ bucket position indicator
 self-leveling
 return-to-dig

Optional Equipment

	Add-on Weight
Auxiliary hydraulics	
Loader	30 lb (13.6 kg)
Standard backhoe	53 lb (24.0 kg)
Extendahoe	50 lb (22.7 kg)
Beacon - rotating	
ROPS/cab	
Buckets	
Loader	
90" (2.29 m)	
General Purpose	1,100 lb (498 kg)
93" (2.36 m) 4-in-1	
(includes hydraulics)	1,515 lb (687 kg)
Backhoe: See backhoe section for listing	
Cab w/heater, floor mat, lockup, tinted glass, front and rear wiper, pressurization & dome lights, ILO canopy	476 lb (215.9 kg)
Cab w/all of the above plus air conditioning	506 lb (229.5 kg)

	Add-on Weight
Cold start aid (ether)	5 lb (2.3 kg)
Two 12 volt batteries	75 lb (34.0 kg)
Dual lever backhoe controls	
Floor mat	
Frost point	
Mirrors	
Retractable seat belt (3")	
ROPS post & fender covers	75 lb (34.0 kg)
Special paint	
Stabilizer pads	
Flat cemetery w/heavy-duty rubber	
Combination, flip over	
Suspension seat	
w/armrests (vinyl or cloth)	
4WD	





ALLIED EQUIPMENT

The 590 turbo is an ideal carrier for a wide range of attachments. With greater machine utilization you can dig, dump and load with the same machine. Meet today's market demand with the versatility and productivity of the Case 590 turbo using these allied supplied attachments.

Contact your Case dealer regarding the use of the right attachment for your application.

Your Case Allied Equipment Manufacturer's Attachment Directory lists a complete selection of allied attachments for loader/backhoe applications.



- | | | |
|------------------------------------|-------------------------|--------------------------|
| Augers | Fire suppression system | Pole erector |
| Barrel handlers | Forks | Rail car coupler |
| Blades | Grapples | Rail tie puller/insertor |
| Booms | Hammers/breakers | Rail wheels |
| Breakers, mechanical | Hand-held tools: | Ripper tooth/rippers |
| Brush cutter | Breakers | Shears |
| Buckets, excavating and loading | Compressors | Snowblowers/plows |
| Cab enclosures for ROPS conversion | Cutters | Stabilizer pads |
| Chains | Drills | Sweepers |
| Charging systems | Pumps | Theft deterrent |
| Cold planer | Saws | Tires |
| Compaction wheel/compactors | Tampers | Track pads |
| Couplers | Heaters/defrosters | Tree spades |
| Drill rig | Indicators | Wheel weights |
| | Pile driver/extractor | |

The dealer who sells and services your Case equipment is also your source for Case Credit financing. Case Credit offers financial products you can count on, including finance plans, leases, insurance, and repair financing.

Case Credit...bringing people and product together.™

Sold and serviced by:

NOTE: All specifications are stated in accordance with SAE Standards or Recommended Practices, where applicable.

IMPORTANT: J I Case reserves the right to change these specifications without notice and without incurring any obligation relating to such change. Units shown may be equipped with non-standard equipment.

J I Case
A Tenneco Company



700 State Street, Racine, WI 53404 U.S.A.