

Loader/Backhoe SPECIFICATIONS 580 Super K





Since we introduced the first loader/backhoe in 1957, we've been committed to designing the most advanced machines on the market... dedicated to developing the engineering technology that has become the standard for the industry. As a result, today's 580 Super K is the perfect

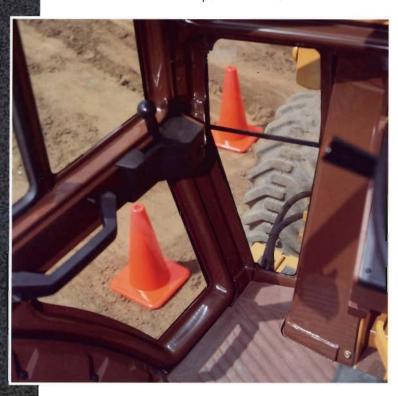
balance of power, hydraulics, geometry and overall performance...the finest loader/backhoe on the market. And you'll know it as soon as you sit at the controls...whether you're trenching... operating the front-end loader... or roading. When only the best will do, turn to the 580 Super K from Case.





From the panoramic visibility to the specially designed suspension seat and easy access controls, the 580 Super K is the loader/backhoe of choice for operator comfort and control.

 Window size, shape and location have been 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.
- Ample legroom between the seat and ROPS post permits unobstructed operator movement between loader and backhoe controls.
- Powerful cooling and heating system ventilates air through six louvers for a comfortable, yearround work environment. Maximum insulation for temperature and sound control.
- Heavy-duty all steel cab roof for safety. Easy mounting antenna and beacon.

- Easy-to-reach loader control lever has convenient transmission disconnect feature to maximize loader productivity.
- 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.
- 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 when the forward/ reverse lever is engaged.
- Gauges and warning lights:
 Converter oil temperature Engine coolant temperature Fuel Tachometer/hourmeter Voltmeter Engine oil pressure Hydraulic system filter Transmission oil filter Air cleaner Brake fluid level
- 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 added protection.
- 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.









Designed specifically for heavy equipment applications, the Case 4-390 diesel engine has been proven to be reliable and efficient through years of the toughest on-the-job experience.

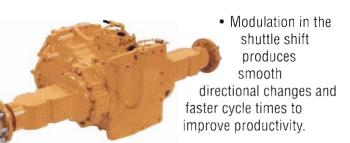


- Integral design of the oil and coolant pumps incorporates components into the engine block. Heat buildup and wear are reduced because of fewer moving parts. Fewer parts to replace means low operating cost and quick maintenance.
- State-of-the-art one-piece cast-iron parent metal bore block eliminates 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. 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.



Whether you're roading or on the job working the loader, the 580 Super K offers you smooth, high performance operation shifting on-the-go or shuttling back and forth.

 Fully synchronized 4-speed forward/reverse shuttle transmission with hydraulicallyactuated clutches and clutch disconnect button allows quick response to changing ground or road conditions.

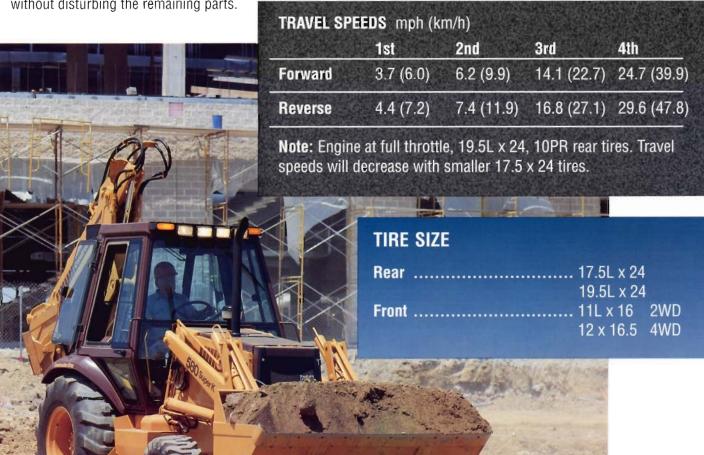


- Single stage torque converter with 2.86 to 1 stall ratio reduces shock loads placed on powertrain components by automatically adjusting torque to handle heavy workload conditions at peak engine efficiency.
- The shuttle transaxle incorporates the inboard planetary drives for reduced gear loading in 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 when 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. Easy access oil cooler mounted in front of the engine radiator makes cleaning the coils effortless.

 Componentized powertrain makes servicing quicker and easier 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.





- 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.
- Standard quick coupler enables fast, easy bucket or attachment changes by simply removing one pin and rolling out the bucket.

 Hydraulically telescoping Extendahoe dipperstick lets you dig deeper and reach further to unload.
 Can be used in its retracted position of 14'8" (4.47 m) or at any point up to its full extension of 18'2" (5.54 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



Case backhoe buckets carry a full one year warranty.

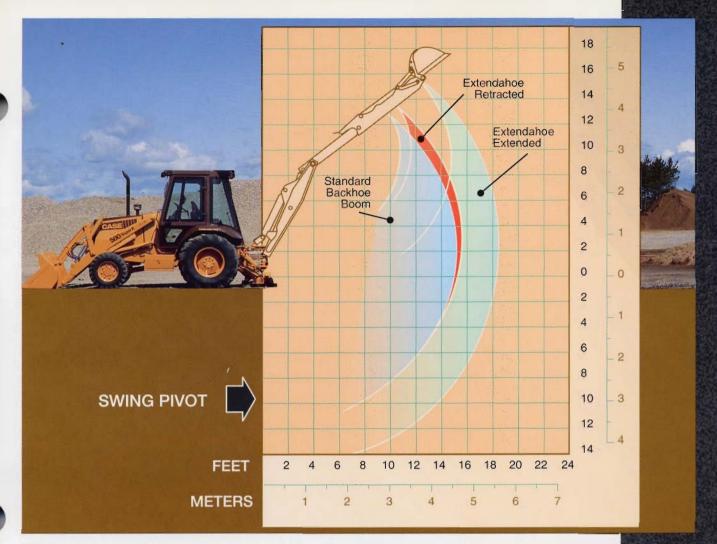
slides from occurring. It can also reduce the number of times required to reposition a machine.

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

BACKHOE BUCKET SIZES AND WEIGHTS

	weight	SAE neaped 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)







- Lift capacity figures on these charts are 87% of the maximum lift force per SAE Definition J31 and J49 at 2550 psi (17 582 kPa) system relief pressure.
- Figures stated apply within 45° either side of prime mover.
 Figures stated are determined by static tests and do not include dynamic factors.

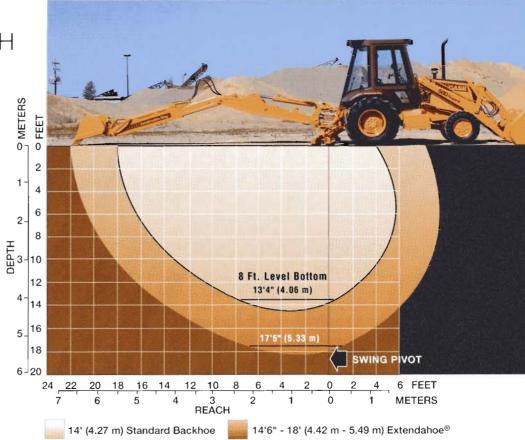
 Machine is equipped with 24" (610 mm) heavy-duty trenching bucket.

 Boom is angled at 65° for dipper lift capacities.

- 6. Loader bucket is on ground.

BOOM LIFT			
Height Above & Below Ground Level	Standard Backhoe	Extendahoe® Retracted Extended	
+16' (4.88 m)			900 lb (408 kg)
+14' (4.27 m)	1,980 lb (898 kg)	1,550 lb (703 kg)	1,160 lb (526 kg)
+12' (3.66 m)	2,270 lb (1030 kg)	1,770 lb (803 kg)	1,230 lb (558 kg)
+ 8' (2.44 m)	2,300 lb (1043 kg)	1,840 lb (835 kg)	1,250 lb (567 kg)
Ground Level	2,090 lb (948 kg)	1,650 lb (748 kg)	1,170 lb (531 kg)
- 8' (2.44 m)	1,960 lb (889 kg)	1,550 lb (703 kg)	1,120 lb (508 kg)
-10' (3.05 m)		1,770 lb (803 kg)	1,180 lb (535 kg)
-14' (4.27 m)			1,610 lb (730 kg)
DIPPER LIFT			
+10' (3'.05 m)	3,910 lb (1774 kg)	3,550 lb (1610 kg)	2,370 lb (1075 kg)
+ 8' (2'.44 m)	4,000 lb (1814 kg)	3,650 lb (1656 kg)	2,470 lb (1120 kg)
+ 6' (1.83 m)	4,440 lb (2014 kg)	4,080 lb (1851 kg)	2,580 lb (1170 kg)







OPERATIONAL DATA

		Extendah	0 e ®
	Standard Backhoe	Retracted	Extended
Digging depth			
SAE, 24" (610 mm) flat bottom			
SAE, maximum	14'5" (4.39 m)	14'10" (4.51 m)	18'3" (5.57 m)
Overall reach from			
Rear axle centerline			
Swing pivot			
Loading height	9'6" (2.90 m)	10'0" (3.06 m)	11'10" (3.63 m)
Loading reach			
Swing arc	180°	180°	180°
Bucket rotation			
#1 position			
#2 position	160°	160°	160°
Stabilizer spread			
Operating position	9'5" (2.87 m)	9'5" (2.87 m)	9'5" (2.87 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 10	,760 lbf (47 863 N)	10,760 lbf (47 863 N) 10,	760 lbf (47 863 N)
Digging force			
Dipper cylinder, SAE 6	,521 lbf (29 010 N)	. 6,185 lbf (27 510 N) 4,	519 lbf (20 100 N)
Leveling angle			
(maximum slope that backhoe			
will make vertical cut)	12°	12°	12°





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 4-in-1 bucket clam or front-end attachments. 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 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, as well as loading trucks.
- 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 5,500 lb (2495 kg) at full height for the general purpose bucket and 5,080 lb (2304 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 cleanup 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.
- The Case FACT System (Fast Attachment Coupling Team) allows quick changing of attachments for increased machine utilization.





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 26 gpm (98 L/min) and 10 gpm (38 L/min) pumps provide positive flow to each circuit. The 26 gpm pump supplies hydraulic oil to the loader. During backhoe operation, the 10 gpm circuit combines with the 26 gpm circuit to provide a total flow of 36 gpm (137 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 580 for precision control and 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.



- Auxiliary hydraulic valves are located under the right-hand cab step for quick coupling of handheld attachments.
- Easy-access hydraulic oil cooler mounted in front of the engine radiator makes cleaning the coils effortless.

Hydraulic pumpsFront-mounted, positive displacement, gear type tandem

Pump capacities:

26 gpm @ 2200 rpm @ 2550 psi (98 L/min @ 2200 r/min @ 17 582 kPa) 10 gpm @ 2200 rpm @ 2550 psi (38 L/min @ 2200 r/min @ 17 582 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 capacity ..26 gpm @ 2200 rpm @ 2550 psi (98 L/min @ 2200 r/min @ 17 582 kPa) Control valve main relief pressure2550 ± 50 psi

 $(17582 \pm 350 \text{ kPa})$

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 capacity36 gpm @ 2200 rpm @ 2550 psi (136 L/min @ 2200 r/min @ 17 582 kPa)

Control valve main relief pressure2550 \pm 50 psi (17 582 \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.

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)	3.25" (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)	4.25" (108 mm)	21.8" (553 mm)	2" (51 mm
Swing (2)	3.5" (89 mm)	12" (305 mm)	1.75" (44 mm
Boom (1)	5" (127 mm)	33.2" (843 mm)	2.25" (57 mm
Dipperstick (1)	5" (127 mm)	23.2" (589 mm)	2.5" (64 mm
Bucket (1)	3.5" (89 mm)	34.3" (871 mm)	2.5" (64 mm
Dipperstick ext. (1)	3" (76 mm)	42.5" (1080 mm)	1.75" (44 mm
Steering			
2WD	2.75" (70 mm)	6.7" (170 mm)	1.5" (38 mm)
4WD	2.6" (65 mm)	8.6" (218 mm)	1.5" (38 mm)



STEERING

- Hydrostatic power steering utilizes on-demand priority flow up to 3.5 gpm (13 L/min) from the main hydraulic 26 gpm (98 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:

2WD w/17.5L rear tires

w/o brakes	25'4" (7.72 m)
w/brakes	21'1" (6.43 m)
4WD w/17.5L rear tires, w/axle	disengaged
w/o brakes	28'9" (8.76 m)
w/brakes	23'0" (7.01 m)

Front Axle Oscillation:

2WD and 4WD 20° total (10° each side)



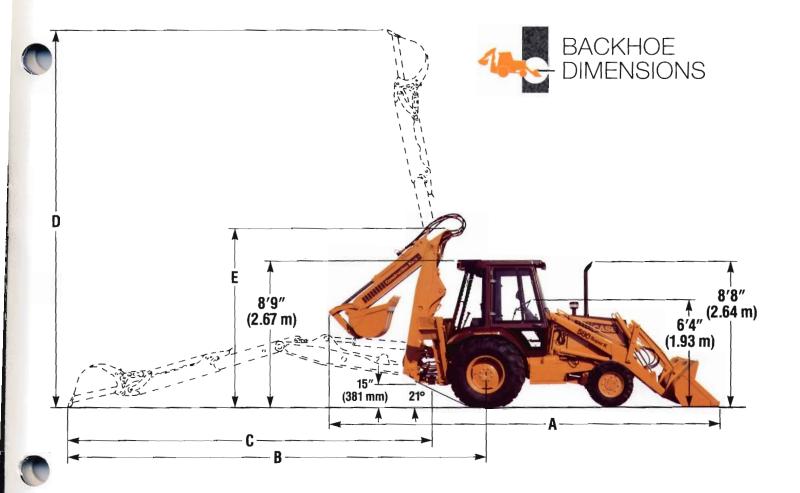




Serviceability is an important consideration when buying a loader/backhoe. The Case exclusive tilt-up hood and ground line servicing make daily maintenance fast and easy for minimum downtime.

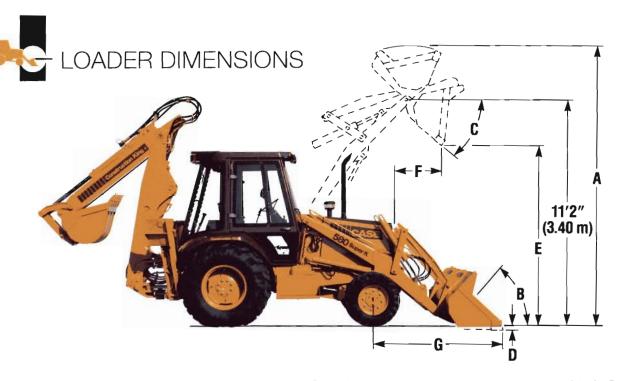
- Easy-opening tilt hood allows quick access to the engine for service and maintenance – can be opened from either side of the unit.
- The heavy-duty tilt hood assembly has cylinder assist for low lift effort.
- Heavy-duty, all steel grille is separate from the hood for easy access to the radiator and 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 Fuel Tank 25.0 gal 94.6 Hydraulic Reservoir 21.0 gal 79.5 total hydraulic system 29.0 gal 109.8 Transaxle (includes shuttle, transmission, differential, final drives & brakes) 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 17.9 qt 16.9 w/o heater 17.2 qt 16.3



			Extend	dahoe [∞]
		Standard Backhoe	Retracted	Extended
A-	Overall length - transport			
	General purpose bucket	22'7" (6.88 m)	22'7" (6.88 m)	NA
		22'5" (6.82 m)		
	Overall reach from -	, ,	,	
B-	Rear axle centerline	21'8" (6.60 m)	22'0" (6.71 m)	
C-		18'0" (5.49 m)		
D-	Overall height, maximum			
E-	Transport height			
	Overall width — transport			
	Angle of departure			
	Height –			
		8'8" (2.64 m)		NA
		8'9" (2.67 m)		
		8'8" (2.64 m)		
		6'4" (1.93 m)		
	Ground clearance at -	, ,	(
		13" (330 mm)	13" (330 mm)	NA
		15" (381 mm)		
	Front wheel tread -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(,	
	2WD	67.5" (1.71 m)	67.5" (1.71 m)	NA
	4WD	67.8" (1.72 m)	67.8" (1.72 m)	NA
	Rear wheel tread			
	Wheel base -	_ (,,	(1100 111)	
		84" (2.13 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 82" (2.08 m) general purpose bucket and standard equipment unless otherwise specified.



		General Purpose	4-in-1 [©] Bucket
A-	Overall operating height	13'11" (4.24 m)	14'1" (4.29 m)
B-	Bucket rollback @ groundline	41°	45°
C-	Dump angle @ full height	45°	55°
D-	Digging depth below grade –		
	Bucket flat	4.6" (117 mm)	4.8" (121 mm)
	Clam open (dozing)	NA	2.7" (68 mm)
E-	Dump clearance @ full height, 45° dump -		
	Bucket	8'10" (2.69 m)	9'4" (2.84 m)
	Clam open	NA	10°11" (3.32 m)
F-	Dump reach @ full height, 45° dump –		
	Bucket	27" (686 mm)	
	Clam open	NA	15" (381 mm)
G-	Reach from front axle centerline,		
	bucket on ground		
	Lift capacity to full height		
	Height to bucket hinge pin raised	11'2" (3.40 m)	11'2" (3.40 m)
	Breakout force	7,900 lbf (35 140 N)	9,000 lbf (40 030 N)
	Cutting edge width –		
	Bucket		
	Maximum grading angle		
	Dozer (clam open)		
	Maximum clam opening		
	Moldboard height		
	Raising time to full height	5.4 sec	5.4 sec
	Bucket dumping time	1.3 sec	1.3 sec
	Lowering time, power down	2.7 sec	2.7 sec
	Lowering time, return-to-dig	3.1 sec	3.1 sec



OPERATING WEIGHT

580 SUPER K 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 (405 kg) for Extendahoe in lieu of 400 lb counterweight

Full instrumentation Hand and foot throttles

Horn

Hydraulically actuated brakes

Hydrostatic steering

Liahts:

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 powershuttle 65 amp alternator

BACKHOE

14' (4.27 m) backhoe or

14'6" - 18' (4.42 m - 5.49 m) Extendahoe

Case backhoe bucket coupler Cleated stabilizer pads

Foot swing control

LOADER

Single-lever control w/bucket position indicator

Self-leveling Return-to-dia

Optional Equipment

Add-on Weight

Auxiliary hydraulics

10 lb (13.6 kg) 53 lb (24.0 kg) Loader Standard backhoe 50 lb (22.7 kg)

Extendahoe

Beacon - rotating ROPS/cab

Buckets

Loader

82" (2.08 m) general purpose 770 lb (349.3 kg)

82" (2.08 m) 4-in-1

(includes hydraulics) 1,130 lb (512.6 kg)

Backhoe: See backhoe section for listing

Cab w/heater, floor mat,

lockup, tinted glass,

front and rear wiper.

pressurization & dome lights,

ILO canopy 320 lb (145.2 kg)

Cab w/all of the above

plus air conditioning 350 lb (158.8 kg)

Closure panels

Cold start aid (ether) 5 lb (2.3 kg)

Two 12 volt batteries 75 lb (34.0 kg)

Dual-lever backhoe controls

Floor mat Fuel tank:

Auxiliary 8 gal (30.3 L)

High capacity 33 gal (125.4 L)

Add-on Weight

Frost point

Lights

Mirrors

Muffler (spark arresting)

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)

Turbocharged engine

(normalizing) 25 lb (11.3 kg)





The 580 Super K is an ideal carrier for a wide range of attachments. Meet today's market demand with the versatility and productivity of the Case 580 Super K 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

Barrel handlers

Blades

Booms

Breakers, mechanical

Brush cutter

Buckets, excavating and loading

Cab enclosures for ROPS

conversion

Chains

Charging systems

Cold planer

Compaction wheel/compactors

Couplers

Drill rig

Fire suppression system

Forks

Grapples

Hammers/breakers

Hand-held tools:

Breakers

Compressors

Cutters

Drills

Pumps

Saws

Tampers

Heaters/defrosters

Indicators

Pile driver/extractor

Pole erector Rail car coupler

Rail tie puller/inserter

Rail wheels

Ripper tooth/rippers

Shears

Snowblowers/plows

Stabilizer pads

Sweepers
Theft deterrent

Tires

Track pads

Tree spades

Wheel weights

The dealer who sells and services your Case Equipment is also your source for Case Credit financing. Case Credit offers 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.

JI Case A Tenneco Company



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