

**case**

**Crawler Dozers**

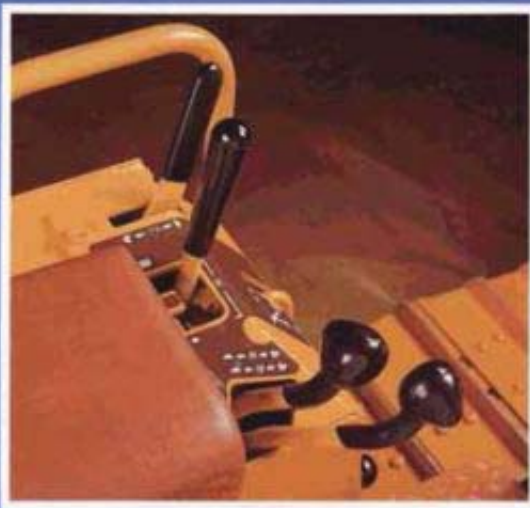
*SPECIFICATIONS*

**550E**



# ***Control... from start to finish.***

Whether you're out on the job site clearing trees, backfilling trenches, or grading slopes or roads, the 550E offers you the performance you can count on to do the job day in and day out. You depend on your crawler for your livelihood and nothing short of the best will do...the best in ease of control, operator comfort, blade precision, steering versatility, and all-around quality and performance. And that's what you'll get with an E Series Crawler, the best. When you need a quality crawler you can rely on, turn to Case and the 550E.





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 or do. 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 services 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.

## ENGINE

The advanced Case Family I 4-390 diesel engine is designed specifically for heavy equipment applications with its high torque lugging ability. Exceptional fuel efficiency and durability keep the 550E producing all day, every day.

- Optional turbocharged 4T-390 engine offers increased horsepower and high altitude compensation for outstanding performance in all applications.
- Integral design incorporates external engine components into the block. Advantages are reduced wear and heat build-up because of fewer moving engine parts – less parts to replace – faster maintenance and easier serviceability.
- One-piece cast iron parent metal bore block allows closer tolerances for added durability.
- Integral oil pump for pressurized lubrication with integral oil cooler and under piston oil nozzles provide positive cylinder wall lubrication. Deep sump for positive oil lubrication when operating on slopes.
- 2-year/2,000 hour parts and labor warranty backs the performance and durability of this outstanding engine.



<b>Model</b> .....	4-390/4T-390
<b>Cylinders</b> .....	4
<b>Bore/Stroke - in.</b> ...	4.02 X 4.72 (102 X 120 mm)
<b>Displacement - in.<sup>3</sup></b> .....	239 (3.92 L)
<b>Horsepower (Naturally aspirated and turbo)*</b>	
Gross .....	75 (56 kW) @ 2200 rpm
SAE Net .....	67 (50 kW) @ 2200 rpm
<b>Maximum torque ft-lb SAE Net*</b>	
Naturally Aspirated ....	186 (252 Nm) @ 1450 rpm
Turbocharged .....	193 (262 Nm) @ 1300 rpm

\*Engine horsepower and torque at flywheel per SAE J1349

## TRANSMISSION/ FINAL DRIVES

Probably the smoothest shifting unit on the market, with an excellent range of operating speeds to match job conditions for optimum performance.

- Constant mesh 4F/4R speeds.
- Pressure-sensing modulation provides the smoothest transition when shifting between forward and reverse, even at full throttle in cold weather or low idle.
- Industry standard U-pattern or optional straight-line F/R shift pattern. Adjustable detents let you set the controls to match your requirements.
- Individual track speeds allow you to make turns under power without braking. Oil-cooled steering clutches are pressure-lubricated for durability and effortless shifting.
- Torque converter automatically adjusts working speeds to load conditions to provide the right push power under heavy loads.
- Componentized powertrain makes servicing easier to save time and money.
- Foot-operated high/low range shifter.
- Single reduction spur and bull gear final drives for durable performance.





# UNDERCARRIAGE

Even the toughest conditions are no match for this undercarriage. A standard sealed and lubricated track with deep-hardened components offers you the maximum durability, while giving you a smooth, stable ride.

- Long Track or Low Ground Pressure versions.
- Permanently sealed and lubricated track rollers, carrier rollers and drum-type idlers to seal out abrasives and maximize life.
- 2" diameter deep-hardened track bushings, thick sprocket teeth, as well as deep-hardened rollers and idlers contribute to longer track life.
- Easy access hydraulic track adjuster makes adjustment quick and simple. Detailed instructions affixed to the machine outline correct chain adjustment specifications to ensure maximum component life.
- Track adjuster guard protects components.
- Front and rear track guides ensure proper chain alignment.

<b>Track frame</b> .....	Rigid
<b>Track rollers</b> (each side) .....	6
<b>Carrier rollers</b> (each side) .....	1
<b>Track gauge</b>	
Long Track .....	53" (1.35 m)
LGP .....	64" (1.63 m)
<b>Length of track on ground</b> .....	78" (1.98 m)
<b>Shoes per track</b> (each side) .....	37
<b>Track shoe width</b>	
Long Track .....	16" (406 mm)
LGP .....	28" (711 mm)
<b>Area of track on ground</b>	
Long Track .....	2,496 in. <sup>2</sup> (1.61 m <sup>2</sup> )
LGP .....	4,368 in. <sup>2</sup> (2.82 m <sup>2</sup> )
<b>Ground pressure</b>	
Long Track .....	5.5 psi (37.9 kPa)
LGP .....	3.2 psi (22.1 kPa)
<b>Height of track shoe</b>	
Long Track .....	1.9" (48 mm)
LGP .....	1.8" (46 mm)

## TRAVEL SPEEDS mph (km/h)

	<b>Forward</b>	<b>Reverse</b>
<b>1st</b>	2.5 (4.0)	2.7 (4.3)
<b>2nd</b>	3.4 (5.5)	3.7 (5.9)
<b>3rd</b>	4.2 (6.8)	4.6 (7.4)
<b>4th</b>	5.8 (9.3)	6.4 (10.3)





Whether pushing a full load or doing close work around obstacles, you'll have full control of the load with a Case 6-way blade powered with responsive hydraulics and guided by an easy effort, grip-fit T-handle control.

	550E	550E LGP
<b>Blade Width</b>	96" (2.44 m)	104" (2.65 m)
<b>Blade Capacity</b>	1.4 yd. <sup>3</sup> (1.07 m <sup>3</sup> )	1.34 yd. <sup>3</sup> (1.03 m <sup>3</sup> )
<b>Blade Height</b>	30" (762 mm)	28" (711 mm)



The hydraulic system delivers high capacity flow and pressure for exceptional, metered response and powerful force. The system also features a positive hold "float" position in the lift circuit for added blade versatility.

- Heavy-duty lift cylinders with large diameter cylinder rods provide superior strength as well as high blade lift force.

<b>Pump</b> .....	Front-mounted gear type
<b>Flow</b> .....	18 gpm (67 L/min) @ 2200 rpm
<b>Pressure</b> .....	2500 psi (17237 kPa)
	LGP 2200 psi (15200 kPa)

## CYLINDERS

Cylinders	Bore	Stroke	Rod
Lift (2)	2.5" (64 mm)	28.0" (711 mm)	1.5" (38 mm)
Angle (2)	4.0" (102 mm)	8.3" (211 mm)	2.0" (51 mm)
Tilt (1)	3.0" (76 mm)	8.0" (203 mm)	1.5" (38 mm)

## BLADE CONTROL

The versatility of the power/angle/tilt blade delivers precision control, no matter what your working conditions. For efficient, productive performance, choose the 550E crawler.



## OPERATOR ENVIRONMENT

Comfort and control is what crawler productivity is all about, and the 550E hits right on target, from the location and smooth operation of the controls to the adjustable seat and armrests that let you customize the machine to your fit.



- Tapered tank design offers excellent 360° visibility to the sides, the rear, and to the blade.
- Controls are located to the left and right of the operator's seat – leaving a clear path for easy entry and exit.
- Easy-to-use seat belts retract when not in use.
- Out-front instrument panel has color-coded, easy-to-read gauges and warning lights.
- Gauges and warning lights:
  - Alternator
  - Engine oil pressure
  - Transmission oil pressure
  - Engine coolant temperature
  - Transmission filter
  - Air filter
  - Fuel
  - Hourmeter
  - Torque converter temperature
- Non-skid footrest doubles as an anti-vandalism panel by folding up and locking over instrumentation.

## CONTROLS

The power to command the 550E with precision control and with a minimum of effort, enables you to concentrate on doing a better job. Controls are located within easy reach to the left and right of the operator and glide with fingertip ease for enhanced operator control.

- Lockable neutral start lever applies the parking brake and locks transmission controls.
- Ignition key switch provides single action start and stop.
- Standard foot throttle accelerator for precision work, and a hand throttle for wide open pushing. Optional decelerator pedal available.
- Customize the forward/reverse pattern by choosing either the standard "U" pattern shifter or optional straight-line shift.
- Foot-operated high/low range shifter.



- Track speed levers shift smoothly for effortless operator-controlled turns.
- Precision blade movements can be made simultaneously in all directions with the grip-fit, T-handle, 6-way blade (power/angle/tilt) control.

 **BRAKES**

Case power wet disc brakes are designed for low effort, precision work. And whether you need to ease around obstructions or stop mid-slope with a full load, you can rely on the braking power of the 550E.

- Features automatic self-adjustment, forced oil cooling, visual wear indicators, and no master/slave cylinders to service.
- Both right and left brakes can be heel-to-toe operated with a minimum of effort.

- Parking brake is automatically applied when the neutral lock lever is engaged or the engine is stopped.
- Pedals are suspended from the firewall to prevent dirt build-up from affecting operation.
- Center brake pedal activates both brakes evenly against the power of the machine.

 **STEERING**

Maneuvering a crawler has never been easier or more productive since the introduction of the E Series Crawlers. You have the option of turning three different ways with Case Crawlers – PowerTurn, gradual turn, or brake turn. With the track speed control levers and new power disc brakes, you can brake turn in tight spots with incredible ease, or PowerTurn with a full load without downshifting, stalling out, or leaving part of the load behind.

- **PowerTurn - (1 track/high speed, 1 track/low speed)**  
The crawler maintains power to both tracks and turns in the direction of the slower track. Allows the operator to push a full load through a turn without braking or raising the blade to lighten the load, to maintain complete load control without sacrificing power in the turn.
- **Gradual Turn - (1 track engaged, 1 in neutral)**  
The unit makes a gradual turn with power to only one track and without braking.
- **Brake Turn - (both tracks in same speed)**  
With power to both tracks, the left or right low effort power brake is applied to make a turn.

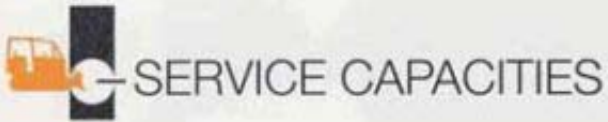




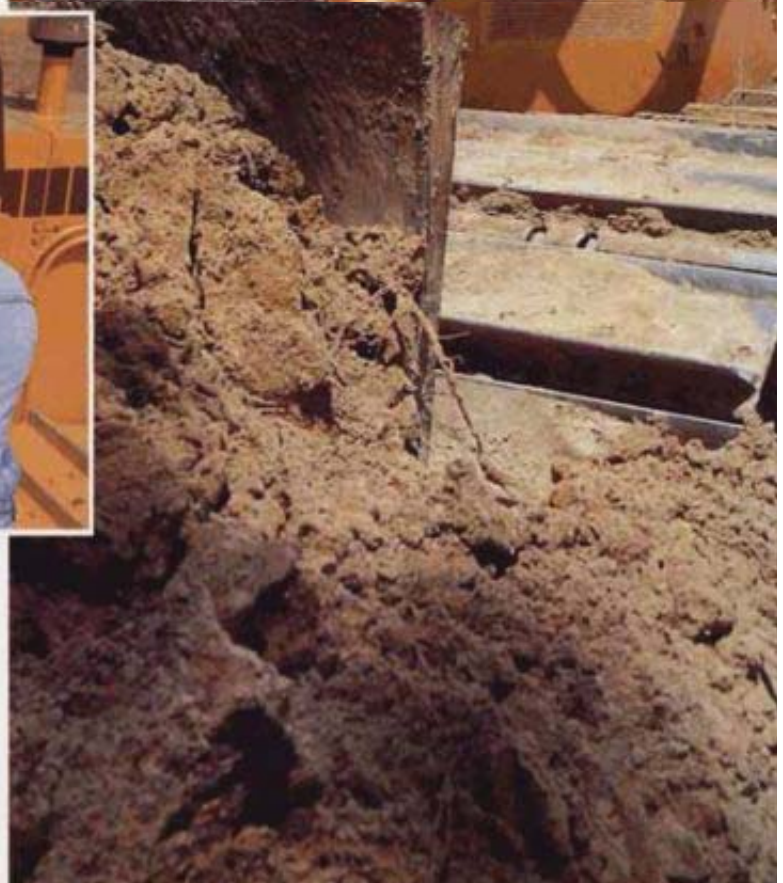


Case heavy-duty electrical components give you the power to start and perform in all weather extremes.

**Voltage** 12 volt, negative ground  
**Alternator** 65 amp  
**Battery** 700 cold-cranking amps @ 0° F (-18° C)  
 Low maintenance

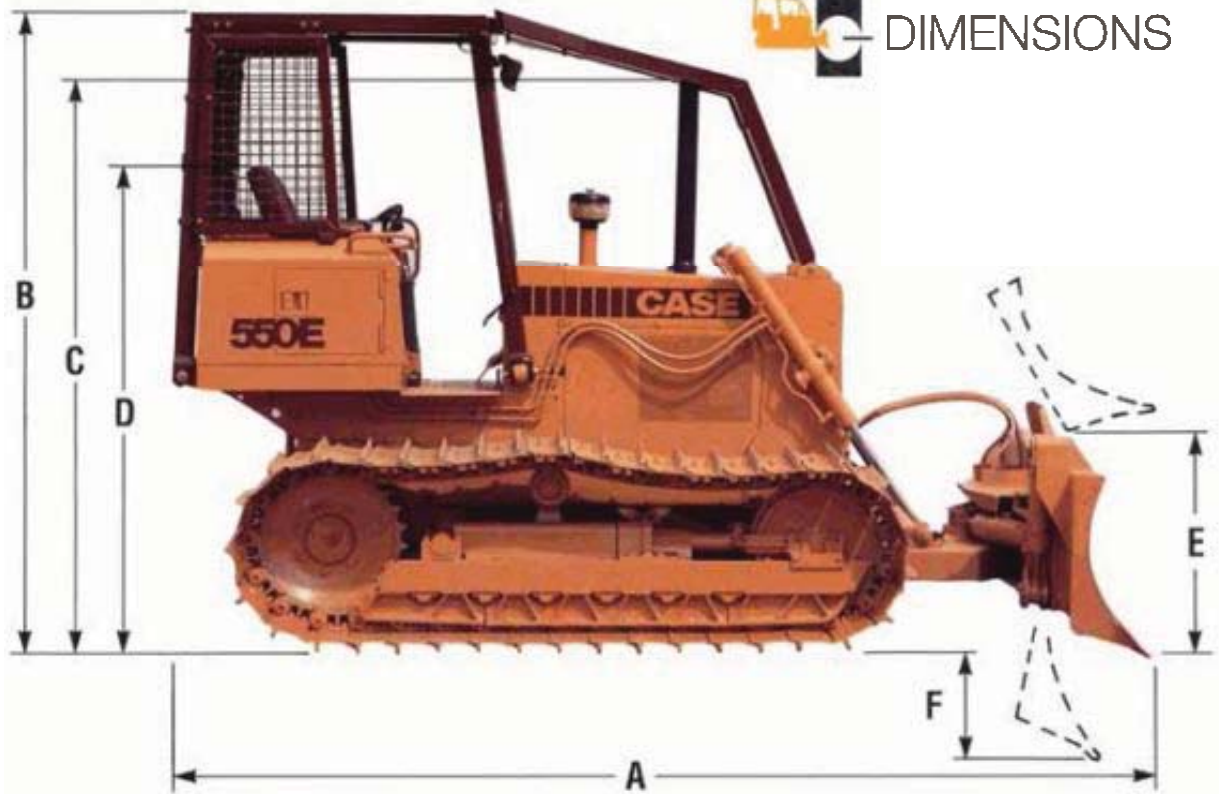


	Gallons	Liters
<b>Fuel</b>	30.5	115.5
<b>Hydraulic system</b>	10.3	39.0
<b>Transmission/torque converter</b>	8.0	30.3
<b>Engine oil (w/filter)</b>	2.8	10.4
<b>Final drives (each side)</b>	1.5	5.7
<b>Cooling System</b>	4.1	15.6





## DIMENSIONS



	Long Track	LGP
<b>A</b> Length - blade straight	12'10.8" (3.93 m)	12'10.8" (3.93 m)
Length - blade angled	14'7.1" (4.45 m)	14'6" (4.41 m)
Width - blade straight	96" (2.44 m)	104" (2.64 m)
Width - blade angled	88.5" (2.25 m)	99.6" (2.53 m)
<b>B</b> Height to top of ROPS	8'4.6" (2.55 m)	8'4.6" (2.55 m)
<b>C</b> Height to top of exhaust pipe	7'5.7" (2.28 m)	7'5.7" (2.28 m)
<b>D</b> Height to top of seat	6'1.0" (1.85 m)	6'1.0" (1.85 m)
Ground clearance	12.7" (323 mm)	12.7" (323 mm)
<b>E</b> Blade lift above ground	39" (990 mm)	39" (990 mm)
<b>F</b> Blade depth below ground	19.6" (497 mm)	19.6" (497 mm)
Blade angle both directions	0 - 25°	0 - 25°
Blade tilt, each end (0° to 8°)	0 - 13" (0 - 328 mm)	0 14" (0 - 356 mm)
<b>Dozer Blade -</b>		
Blade height	30" (762 mm)	28" (711 mm)
Push beam	Inside	Inside
SAE blade capacity	1.4 yd. <sup>3</sup> (1.07 m <sup>3</sup> )	1.34 yd. <sup>3</sup> (1.02 m <sup>3</sup> )
<b>Tractor Dozer -</b>		
Overall length with ripper raised	14' 6.3" (4.43 m)	14' 6.3" (4.43 m)
- less "C" frame and blade	9'10" (3.00 m)	9'10" (3.00 m)
Maximum shoe width	16" (406 mm)	28" (711 mm)
Overall width at track with standard shoes	69" (1.75 m)	92" (2.34 m)
Turning clearance circle, pivot turn	20'6" (6.25 m)	20'8" (6.30 m)
<b>Operating weight (approx.)</b>	13,425 lb. (6089 kg) <sup>1</sup>	13,525 lb. (6134 kg) <sup>2</sup>

<sup>1</sup>Includes ROPS, full fuel tank, 170 lb. (77.1 kg) operator, 16" (457 mm) track shoes, 500 lb. (2268 kg) counterweight.

<sup>2</sup>Includes ROPS, full fuel tank, 170 lb. (77.1 kg) operator, 28" (711 mm) track shoes.

**Note:** Case High Flotation LGP Crawler Tractors are designed for use in mud or soft footing. If misapplied by frequent use in ground conditions other than those described, decreased undercarriage life or possible component damage can result.

# 550E EQUIPMENT DATA

## Standard Equipment

Accelerator pedal  
Adjustable seat and armrests  
Auto-engage parking brake  
Backup alarm  
Direct drive gear pump  
Dual stage, dry air cleaner with indicator  
Engine side shields  
Float position in lift circuit  
Footrest  
Full instrumentation  
Fuse circuit protection  
Hand throttle  
Heavy-duty blade with hydraulic lift/lower, angle and tilt  
High/Low range, Forward/Reverse modulation  
Horn  
Hydraulic track adjuster with guard

Inside push beam  
Lockable neutral start lever  
Master disconnect  
Oil-cooled power disc brakes  
Pusher fan  
Radiator guard  
Retractable seat belt (2")  
**ROPS canopy**  
Sealed and lubricated track components  
Single lever blade control  
Torque converter drive  
Track guides (front and rear)  
Track shoes (16")  
"U" pattern forward/reverse shift control  
Vandal protection lockup package  
4F/4R Powershift  
65 amp alternator

## Optional Equipment

	<b>Add on weight</b>
Anti-sandblast radiator	15 lb. (6.7 kg)
Aux. hydraulic valve (4 spool)	20 lb. (8.9 kg)
Cold start aid (ether)	4 lb. (1.8 kg)
Counterweight for Long Track (includes drawbar)	530 lb. (235.9 kg)
Decelerator	5 lb. (2.2 kg)
Drawbar for LGP	36 lb. (16.0 kg)
Front counterweight with mounting kit	950 lb. (422.8 kg)
Front pull hook	10 lb. (4.5 kg)
Heavy-duty end bits	10 lb. (4.5 kg)
Hydraulic tube guards	10 lb. (4.5 kg)
Lights (2 front, 2 rear)	8 lb. (3.6 kg)
Pre-cleaner	5 lb. (2.2 kg)
Radiator brush screen	8 lb. (3.6 kg)
Rear transmission-guard	30 lb. (13.4 kg)
Rear view mirror	3 lb. (1.3 kg)
Reversible fan	10 lb. (4.5 kg)
Rock guards	140 lb. (62.3 kg)
ROPS brush guards (sweeps)	147 lb. (65.4 kg)
ROPS headliner	8 lb. (3.63 kg)
ROPS rear screen	40 lb. (17.8 kg)
ROPS side screens	75 lb. (33.4 kg)
Seat belt (3")	1 lb. (.5 kg)
Spark-arresting muffler	9 lb. (4.0 kg)
Special paint	
Sprocket cut away (relieved)	
Straight line F/R shifter	
Suspension seat	40 lb. (18.1 kg)
Track shoes	
20"	300 lb. (136.1 kg)
28"	890 lb. (403.7 kg)

	<b>Add on weight</b>
Turbocharged engine	25 lb. (11.4 kg)
Wear guards for final drive	30 lb. (13.4 kg)

### Ripper

Attachment	1,270 lb. (565.2 kg)
Overall width	57" (1.45 m)
Maximum penetration	14.3" (364 mm)
Ground clearance (at carry)	10.7" (271 mm)
Number of shanks	3 std. - 5 opt.
Shank spacing	3 - 27.1" (688 mm)
	5 - 13.6" (345 mm)
Ripper tips	Replaceable
Hydraulic cylinder	
Bore	Stroke
3.0" (76 mm)	x 10.5" (267 mm)
	Rod
	x 1.5" (38 mm)





The size, maneuverability, and ease of control of the 550E makes it an ideal carrier for a wide range of attachments. With greater machine utilization, you can clear a site, slope a bank, or rip tough surface material. Meet today's market demand with the versatility and productivity of a Case 550E using these allied supplied attachments.

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

The Case Allied Equipment Manufacturer's Attachment Directory lists a complete selection of allied attachments for crawler applications.

- Angle blades
- Bank slopers
- Blade-mounted rippers
- Cab
- Cable plow
- Dozer rakes
- Fireline plows
- Land clearing blade
- Land clearing rake
- Log arch
- Rubber track pads
- Stump splitter
- 3 roller fairlead/arches
- U-blade
- Winch



Sold and serviced by:

**NOTE:** All specifications are stated in accordance with PSCA Definitions or 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. Unit shown on front cover may be equipped with non-standard equipment.

**J I Case**  
A Tenneco Company



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