# 247B/257B Series 3 Multi Terrain Loaders

CAT®

259B Series 3



	247B Series 3	257B Series 3	259B Series 3
Engine			
Engine Model	Cat C2.2 T	Cat C3.4 DIT	Cat C3.4 DIT
Net Power (SAE 1349/ISO 9249)	42 kW (56 hp)	53 kW (71 hp)	53 kW (71 hp)
Weights			
Operating Weight	3174 kg (6,997 lb)	3656 kg (8,060 lb)	4052 kg (8,934 lb)
Operating Specifications			
Rated Operating Capacity at 50% Tipping Load	975 kg (2,150 lb)	1213 kg (2,675 lb)	1338 kg (2,950 lb)

#### **Features**

#### **Comfortable Operator Station**

Spacious, comfortable cab and ergonomic, low effort joystick controls reduce operator fatigue.

#### **Suspended Undercarriage**

Suspended undercarriages on the Cat Compact Track Loaders and Multi Terrain Loaders absorb shocks and vibrations from uneven terrain while allowing higher operating speeds, better material retention and increased operator comfort.

#### **High Performance Power Train**

High horsepower and torque deliver outstanding performance.

#### **Advanced Hydraulic System**

Hydraulic system provides maximum power and reliability for demanding applications.

#### **More Work Tools**

Caterpillar's broad range of performance matched work tools make the Cat Compact Track Loader and Multi Terrain Loader the most versatile machines on the jobsite.



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The Cat B-Series 3 Compact Track Loaders and Multi Terrain Loaders feature suspended undercarriages for lower ground pressures and superior traction. Spacious, ergonomic operator station and easy-to-use pilot operated joystick controls keep you comfortable throughout the work day. High performance power train, advanced hydraulic system, traditional Cat reliability and a wide range of Cat Work Tools improve your productivity in the toughest working conditions.

# **Operator Station**

Superior comfort to keep you productive throughout the work day.

#### **All Day Comfort**

Comfort and ease of operation have been designed into every aspect of the operator station. The wide, spacious interior and uncluttered floor provide a comfortable work environment with excellent head, shoulder and leg room to keep productivity high and fatigue low. The adjustable seat and low effort controls keep the operator comfortable throughout the work day.

#### **Low Effort Joystick Controls**

Ergonomic, pilot hydraulic controls deliver precise control with minimal effort. The right joystick controls the loader raise, lower and tilt functions while the left joystick controls the forward and reverse travel speed plus direction. Optional deluxe joysticks provide additional auxiliary controls with fingertip control of many work tool functions, including proportional work tool hydraulics and work tool electrical. Basic and deluxe joystick functions include one-touch continuous auxiliary hydraulic flow and momentary auxiliary hydraulic flow.

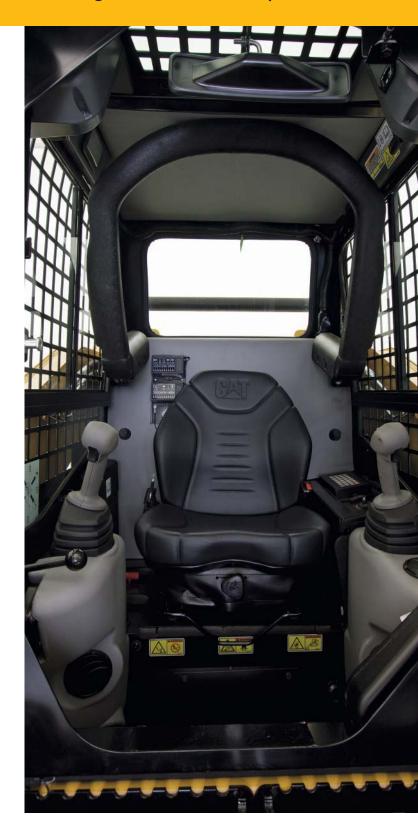
#### **Excellent Visibility**

The wide cab opening offers an exceptional view to the work tool. The sloped angle of the engine compartment allows excellent visibility to the rear of the machine. The standard rear view mirror gives the operator a panoramic view of the machine's rear and sides. The side windows remove easily for cleaning.

#### **Additional Features for Maximum Comfort**

The B-Series 3 machines offer the following additional features to help you on the job:

- Suspension seat option for even greater operator comfort.
- Easy to read instrument panels.
- Optional air conditioner and heater for greater comfort in extreme conditions.
- Standard floor mat with footrest provides non-slip surface and can be removed for easy cleaning.
- Ergonomic, contoured and padded armbar provides comfortable operation.



# **Undercarriage**

Choice of undercarriage to meet your specific needs.





#### **Multi Terrain Loader Undercarriage**

The Cat 247B Series 3 and 257B Series 3 Multi Terrain Loaders feature a fully suspended, rugged, durable rubber track that is lightweight and pliable, yet reinforced with high tensile strength cords. The undercarriage provides extremely low ground pressure, allowing these machines to operate over sensitive surfaces and in soft underfoot conditions. The independently suspended undercarriage distributes the load and greatly reduces shock and vibration throughout the machine for a comfortable ride and excellent bucket load retention. The undercarriage also features:

- Heavy duty torsion axles that independently suspend each side of the machine frame for a smoother ride over rough terrain, even at high speeds.
- Components that are replaceable as individual wear items, reducing owning and operating costs.
- Low ground pressure: 27.3 kPa (4.0 psi) for the 247B Series 3 and 31 kPa (4.5 psi) for the 257B Series 3.

#### **Compact Track Loader Undercarriage**

The Cat 259B Series 3 Compact Track Loader features a fully suspended, steel embedded rubber track undercarriage for versatility, durability and comfort. Heavy-duty torsion axles suspend the undercarriage and can move independently relative to the machine and each other. These axles absorb most of the shock to the machine and operator, especially over rough terrain. This means smooth travel, even at high speeds, as well as better load retention and greater productivity. The undercarriage also features:

- Steel embedded rubber track that provides excellent durability in a wide variety of applications.
- Steel rollers with metal face seals for long-term durability and reliability in even the toughest conditions.
- Simple recoil grease tensioning system for quick track tension adjustment.
- Two track options standard track width of 320 mm (12.6 in) or optional 400 mm (15.7 in) track.
- Low ground pressure: 41.2 kPa (6.0 psi) with the standard track and 34.4 kPa (5.0 psi) with optional 400 mm (15.7 in) track.

# **Power Train**

### Aggressive performance with fuel efficiency.

#### **Cat Engine**

The high performance power train provides high engine horsepower and torque. The B-Series 3 machines feature rugged, reliable Cat engines that meet U.S. EPA Tier 4 Interim and EU Stage IIIA emissions requirements.

#### **Hand and Foot Throttles**

Hand and foot throttles allow the operator to match engine speed to the task. The hand throttle is ideal for jobs requiring constant engine speed such as cold planing, trenching or snow blowing. The foot throttle lets the operator vary engine speed and minimize fuel consumption for other tasks such as load and carry, truck loading, grading and dozing.

#### **Anti-Stall Feature**

The anti-stall system maximizes machine power at all times by matching the engine torque with the operational requirements of the hystat and implement systems. This load sensing feature prevents the engine from stalling even during part throttle operation, keeping productivity high and fuel consumption low.

#### **Two Speed**

Two speed is available as standard equipment on the 259B Series 3 Compact Track Loader and as an option on the 257B Series 3 Multi Terrain Loader to improve cycle times and get the job done faster.





# Lift Linkages

Built for tough jobs.

#### **Choice of Lift Designs**

Two types of lifting arrangements are available – vertical lift (path #1 above) and radial lift (path #2) – to meet your specific application needs.

#### **Vertical Lift**

The 257B Series 3 and 259B Series 3 feature the vertical lift design which provides extended reach and lift height for quick and easy truck loading and material placement. The lift height is 3069 mm (121 in) on the 257B Series 3 and 3046 mm (120 in) on the 259B Series 3.

#### **Radial Lift**

The 247B Series 3, with its radial lift design, delivers excellent digging performance with superior mid-lift reach.



# **Hydraulics**

Exceptional lift, breakout and power to meet your needs.

#### **High Performance Hydraulic System**

Maximum power and reliability are built into the machine's hydraulic system. In addition to providing power to the tracks, this system also provides the loader lift and tilt functions, powers the auxiliary circuit to drive work tools and drives the engine cooling fan. The hydraulic pumps are driven directly off the engine for maximum hydraulic performance and reliability – no belts are used. The hydraulic system also features:

- Standard auxiliary hydraulics to power work tools that are available through quick connect hydraulic couplings rigidly mounted to the loader arm.
- Cat ToughGuard XT<sup>TM</sup> hoses for increased reliability and durability.

#### **High Efficiency Cooling System**

Cooling capacity is maximized through the use of a side-by-side cooling package and hydraulically driven cooling fan.

- High-efficiency, hydraulic oil cooler lets the machine work longer and harder in higher ambient temperatures, even with continuous work tool usage.
- Efficient, hydraulically driven cooling fan provides cooling even when the machine is under load.
- Optional variable speed demand fan provides improved fuel efficiency, increased machine performance, reduced sound levels and improved cold weather performance.

# **Work Tools**

## Do more jobs with one machine with Cat Work Tools.

#### The Right Tool for the Job

Get the most out of your machine with the comprehensive line of Cat Work Tools. Designed and built for optimum performance and durability, these tools deliver high productivity in a variety of applications to maximize the versatility and flexibility of the Cat Compact Track Loader and Multi Terrain Loader:

- Augers
- Backhoes
- Blades (angle, dozer)
- Buckets (general purpose, high capacity, dirt, utility, light material, multi purpose, industrial grapple, utility grapple)
- Brooms (angle, pickup, utility)
- Brushcutters
- Cold Planers
- Forks (pallet, industrial grapple, utility grapple, utility)
- Hydraulic Hammers
- Landscape Tillers
- Landscape Rakes
- Material Handling Arm
- Power Box Rakes
- Shear
- Snow Blowers
- Stump Grinders
- Trenchers
- Vibratory Compactors
- Wheel Saws

#### **Quick Couplers**

Work tools can be changed quickly and easily with the machine's quick coupler system. The standard quick coupler features manual engagement and disengagement of work tools using two high leverage handles. The optional hydraulic quick coupler allows the operator to quickly change tools without leaving the cab.







# **Serviceability**

## Simplified service and maintenance save you time and money.



#### **Easy Service**

Convenient service features make maintenance easy, reducing your downtime:

- Industry exclusive tilt-up cooling package provides superior access to service points and coolers.
- Rear door opens 90 degrees for easy access to both sides of the engine.
- Cab tilts rearward for easy access to all hydraulic pumps, motors, valves, lines and hydraulic tank.
- Daily maintenance points are easily accessible.
- Electrical wiring is color coded and numbered for easy identification.
- S·O·S<sup>SM</sup> oil sampling valve is standard to allow regular monitoring of the hydraulic oil quality.

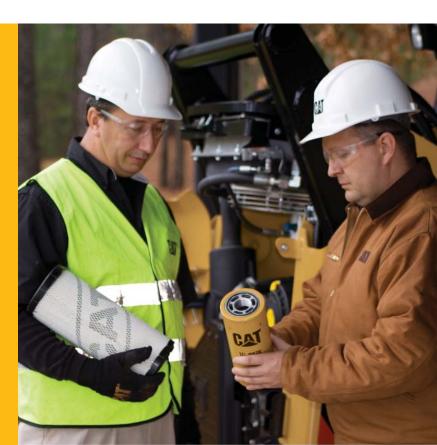
# **Customer Support**

Support you can count on.

#### **Superior Dealer Services**

Your Cat dealer is ready to assist you with your purchase decision and everything after.

- Make comparisons of machines, with estimates of component life, preventative maintenance and cost of production.
- Financing packages are flexible to meet your needs.
- Your Cat dealer can evaluate the cost to repair, rebuild and replace your machine, so you can make the right decision.
- For more information on Cat products, dealer services and industry solutions, visit us at www.cat.com.



### **B-Series 3 Compact Track and Multi Terrain Loaders Specifications**

Engine		
Engine Model		
247B Series 3	Cat C2.2	Γ
257B/259B Series 3	Cat C3.4 l	DIT
Net Power (SAE 1349	9/ISO 9249)	
247B Series 3	42 kW	56 hp
257B/259B Series 3	53 kW	71 hp
Gross Power (SAE J1	995)	
247B Series 3	46 kW	62 hp
257B/259B Series 3	55 kW	74 hp
Displacement		
247B Series 3	2.2 L	134 in <sup>3</sup>
257B/259B Series 3	3.3 L	201 in <sup>3</sup>
Stroke		
247B Series 3	100 mm	3.9 in
257B/259B Series 3	120 mm	4.7 in
Bore		
247B Series 3	84 mm	3.3 in
257B/259B Series 3	94 mm	3.7 in

Weights*		
Operating Weight		
247B Series 3	3174 kg	6,997 lb
257B Series 3	3656 kg	8,060 lb
259B Series 3 (320 mm/12.6 in tracks)	4052 kg	8,934 lb
259B Series 3 (400 mm/15.7 in tracks)	4185 kg	9,227 lb

<b>Operating Spec</b>	ifications	*
Rated Operating Cap (50% Tipping Load)	pacity	
247B Series 3	975 kg	2,150 lb
257B Series 3	1213 kg	2,675 lb
259B Series 3	1338 kg	2,950 lb
Rated Operating Cap (35% Tipping Load)	pacity	
247B Series 3	683 kg	1,505 lb
257B Series 3	848 kg	1,870 lb
259B Series 3	937 kg	2,065 lb
Rated Operating Cap with Optional Count		
257B Series 3	1236 kg	2,725 lb
259B Series 3	1360 kg	3,000 lb
Tipping Load		
247B Series 3	1950 kg	4,300 lb
257B Series 3	2427 kg	5,350 lb
259B Series 3 (320 mm/12.6 in tracks)	2676 kg	5,900 lb
Breakout Force, Tilt	Cylinder	
247B Series 3	1842 kg	4,060 lb
257B Series 3	2045 kg	4,508 lb
259B Series 3	2045 kg	4,508 lb
Ground Contact Are		
247B Series 3	1.14 m <sup>2</sup>	1,770 in <sup>2</sup>
257B Series 3	1.14 m <sup>2</sup>	1,770 in <sup>2</sup>
259B Series 3 (320 mm/12.6 in tracks)	0.96 m <sup>2</sup>	1,495 in <sup>2</sup>
259B Series 3 (400 mm/15.7 in tracks)	1.19 m <sup>2</sup>	1,848 in <sup>2</sup>
Ground Pressure		
247B Series 3	27.3 kPa	4.0 psi
257B Series 3	31 kPa	4.5 psi
259B Series 3 (320 mm/12.6 in tracks)	41.2 kPa	6.0 psi
259B Series 3 (400 mm/15.7 in tracks)	34.4 kPa	5.0 psi

<sup>\*</sup>Operating Weight, Operating Specifications and Dimensions all based on 75 kg (165 lb) operator, all fluids, 1 speed (247B/257B Series 3) or 2 speed (259B Series 3), OROPS, dirt bucket, no optional counterweights and manual quick coupler (unless otherwise noted).

<b>Hydraulic Syste</b>	m	
Hydraulic Flow	Standard	
Loader Hydraulic Pressure	23 000 kPa	3,335 psi
Loader Hydraulic Flow – 247B Series 3	61 L/min	16 gal/min
Loader Hydraulic Flow – 257B/259B Series 3	83 L/min	22 gal/min
Hydraulic Power (calculated) – 247B Series 3	23.2 kW	31 hp
Hydraulic Power (calculated) – 257B/259B Series 3	31.9 kW	42.8 hp

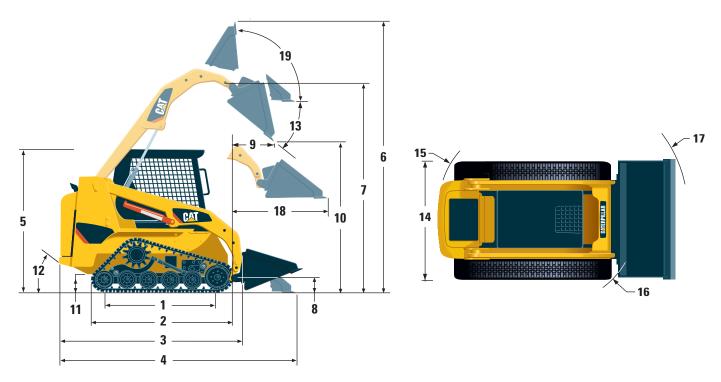
# **B-Series 3 Compact Track and Multi Terrain Loaders Specifications**

Cab	
ROPS	SAE J1040 MAY94, ISO 3471:1994
FOPS	SAE J/ISO 3449 APR98 LEVEL I, ISO 3449:1992 Level I
FOPS Level II	SAE J/ISO 3449 APR98 LEVEL II, ISO 3449:1992 Level II (optional)

Power Train		
Travel Speed (Forv	vard or Reverse	<del>(</del> )
247B Series 3	11.3 km/h	7.0 mph
257B Series 3	11.1 km/h	6.9 mph
259B Series 3	9.5 km/h	5.9 mph
Travel Speed (Forv	vard or Reverse	<del>(</del> )
257B Series 3 (optional)	16.1 km/h	10 mph
259B Series 3 (standard)	13.6 km/h	8.5 mph

Service Refill Capacities		
Cooling System	10 L	2.6 gal
Engine Crankcase		
247B Series 3	10 L	2.6 gal
257B/259B Series 3	9 L	2.4 gal
Fuel Tank		
247B Series 3	65 L	17 gal
257B/259B Series 3	84 L	22.2 gal
Hydraulic System	55 L	14.5 gal
Hydraulic Tank	35 L	9.2 gal

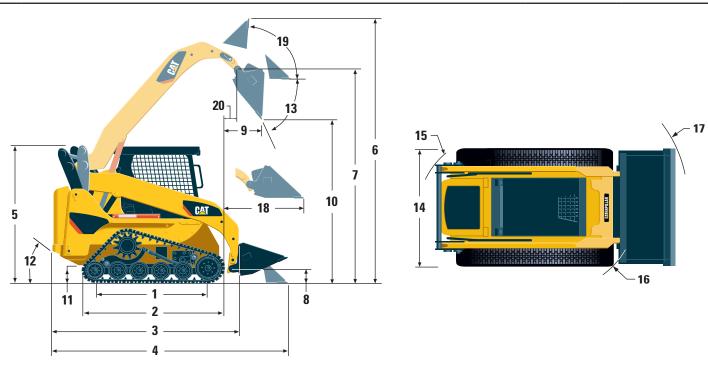
### **Dimensions**



	247B S	247B Series 3	
	mm	in	
1 Length of Track on Ground	1499	59	
2 Overall Length of Track	1899	75	
3 Length without Bucket	2518	99	
4 Length with Bucket on Ground	3285	129	
<b>5</b> Height to Top of Cab	1990	78	
6 Maximum Overall Height	3799	150	
7 Bucket Pin Height at Maximum Lift	2862	112	
8 Bucket Pin Height at Carry Position	220	8.7	
9 Reach at Maximum Lift and Dump	625	25	
10 Clearance at Maximum Lift and Dump	2134	84	
11 Ground Clearance	267	10	
12 Departure Angle	4	41°	
13 Maximum Dump Angle	4	0°	
14 Vehicle Width	1676	66	
15 Turning Radius from Center – Machine Rear	1377	54	
<b>16</b> Turning Radius from Center – Coupler	1312	52	
17 Turning Radius from Center – Bucket	2095	82	
18 Maximum Reach with Arms Parallel to Ground	1339	53	
19 Rack Back Angle at Maximum Height	82°		

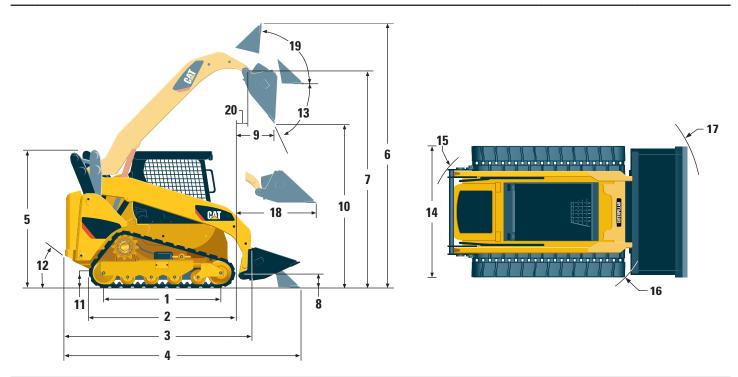
# **B-Series 3 Compact Track and Multi Terrain Loaders Specifications**

### **Dimensions**



	257B S	257B Series 3	
	mm	in	
1 Length of Track on Ground	1499	59	
2 Overall Length of Track	1899	75	
3 Length without Bucket	2718	107	
4 Length with Bucket on Ground	3439	135	
<b>5</b> Height to Top of Cab	2035	80	
6 Maximum Overall Height	3895	153	
7 Bucket Pin Height at Maximum Lift	3069	121	
8 Bucket Pin Height at Carry Position	212	8	
9 Reach at Maximum Lift and Dump	758	30	
10 Clearance at Maximum Lift and Dump	2309	91	
11 Ground Clearance	246	10	
12 Departure Angle	3′	7°	
13 Maximum Dump Angle	50	50°	
<b>14</b> Vehicle Width	1676	66	
15 Turning Radius from Center – Machine Rear	1451	57	
<b>16</b> Turning Radius from Center – Coupler	1412	56	
17 Turning Radius from Center – Bucket	2192	86	
18 Maximum Reach with Arms Parallel to Ground	1335	53	
19 Rack Back Angle at Maximum Height	8′	7°	
20 Bucket Pin Reach at Maximum Lift	358	14.1	

### **Dimensions**



	259B S	259B Series 3	
	mm	in	
1 Length of Track on Ground	1495	59	
2 Overall Length of Track	1995	79	
3 Length without Bucket	2722	107	
4 Length with Bucket on Ground	3432	135	
<b>5</b> Height to Top of Cab	1986	78	
6 Maximum Overall Height	3872	152	
7 Bucket Pin Height at Maximum Lift	3046	120	
8 Bucket Pin Height at Carry Position	195	8	
9 Reach at Maximum Lift and Dump	740	29	
10 Clearance at Maximum Lift and Dump	2243	88	
11 Ground Clearance	222	9	
12 Departure Angle	35	35°	
13 Maximum Dump Angle	49.	49.5°	
14 Vehicle Width (320 mm/12.6 in tracks)	1676	66	
Vehicle Width (400 mm/15.7 in tracks)	1755	69	
15 Turning Radius from Center – Machine Rear	1471	58	
<b>16</b> Turning Radius from Center – Coupler	1393	55	
17 Turning Radius from Center – Bucket	2174	86	
18 Maximum Reach with Arms Parallel to Ground	1338	53	
19 Rack Back Angle at Maximum Height	87	87°	
20 Bucket Pin Reach at Maximum Lift	309	12.1	

#### **B-Series 3 Compact Track and Multi Terrain Loaders Standard Equipment**

Standard equipment may vary. Consult your Cat dealer for details.

#### **ELECTRICAL**

12 volt Electrical System
85 ampere Alternator (247B Series 3)
90 ampere Alternator (257B/259B Series 3)
Automatic Glow Plug Activation
Heavy Duty Battery, 880 CCA
(standard on the 257B/259B Series 3)
Ignition Key Start/Stop Switch
Lights: Gauge backlighting, two rear
tail lights, two adjustable front and
rear halogen lights, dome light.

#### OPERATOR ENVIRONMENT

Gauges: Fuel level, hour meter Operator Warning System Indicators: Air filter restriction, alternator output, armrest raised/operator out of seat, engine coolant temperature, engine oil pressure, glow plug activation, hydraulic filter restriction, hydraulic oil temperature, parking brake engaged

Vinyl seat

Pull Down Ergonomic Contoured Armrest
Control Interlock System, when operator
leaves seat or armrest raised: Hydraulic
system disables, hydrostatic transmission
disables, parking brake engages
ROPS Cab, Open, Tilt Up
FOPS, Level I
Top and Rear Windows
Floor Mat
Interior Rear View Mirror
12 volt Electric Socket
Horn
Backup Alarm
Hand and Foot Throttle

#### **POWER TRAIN**

Cat C2.2 T Diesel Engine (247B Series 3) Cat C3.4 DIT Diesel Engine (257B/259B Series 3) Engines are Tier 4 Interim/Stage IIIA Compliant

Air Cleaner, Dual Element, Radial Seal S·O·S<sup>SM</sup> Sampling Valve, Hydraulic Oil Filters, Spin-on, Hydraulic Filters, Bayonet-type, Fuel and Water Separator

Tilt Up Radiator/Hydraulic Oil Cooler Spring Applied, Hydraulically Released Parking Brakes

Hydrostatic Transmission

#### **OTHER**

Engine Enclosure, Lockable
Extended Life Antifreeze, –36° C (–33° F)
Machine Tie Down Points (4)
Support, Lift Arm
Hydraulic Oil Level Sight Gauge
Radiator Coolant Level Sight Gauge
Radiator, Expansion Bottle
Cat ToughGuard™ Hose
Auxiliary, Hydraulics, Continuous Flow
Heavy Duty, Flat Faced Quick Disconnects
Split D-Ring to Route Work Tool Hoses
Along Side of Left Lift Arm
Electrical Outlet, Beacon
Belly Pan Cleanout

#### MANDATORY EQUIPMENT

Quick Coupler, Mechanical or Hydraulic Seat Belt, 50 mm (2 in) or 75 mm (3 in) EU Preparation Package (Europe only – includes Demand Fan) Cooling Fan, Demand or Standard (EU Preparation Package includes Demand Fan)

Comfort Packages

(must select one of the following):

- Open ROPS (C0): Static Seat
- Open ROPS (C1): Suspension Seat, Deluxe Headliner
- Enclosed ROPS (C2): Features of C1 Package plus Heater, Cab Door, Side Windows, Cup Holder, Cab Debris Barrier
- Enclosed ROPS (C3): Features of C2 Package plus Air Conditioner

Control Packages for the 247B Series 3 (must select one of the following):

- Control Package 1: On/Off Auxiliary Hydraulics Basic
- Control Package 2: Proportional Auxiliary Hydraulics Deluxe
- Control Package 3: Proportional Auxiliary Hydraulics Deluxe, Work Tool Harness

Control Packages for the 257B Series 3 (must select one of the following):

- Control Package 1: On/Off Auxiliary Hydraulics Basic
- Control Package 2: Proportional Auxiliary Hydraulics Deluxe, 1 Speed
- Control Package 3: Proportional Auxiliary Hydraulics Deluxe, 1 Speed, Work Tool Harness
- Control Package 4: Proportional Auxiliary Hydraulics Deluxe, 2 Speed
- Control Package 5: Proportional Auxiliary Hydraulics Deluxe, 2 Speed, Work Tool Harness

Control Packages for the 259B Series 3 (must select one of the following):

- Control Package 1: Proportional Auxiliary Hydraulics Deluxe, 2 Speed
- Control Package 2: Proportional Auxiliary Hydraulics Deluxe, 2 Speed, Work Tool Harness

### **B-Series 3 Compact Track and Multi Terrain Loaders Optional Equipment**

Optional equipment may vary. Consult your Cat dealer for details.

400 mm (15.7 in) track with dual flange front idler (259B Series 3 only) 2 Speed Travel (257B Series 3 only) Variable Speed Demand Fan Counterweight Beacon, Rotating Engine Block Heater, 120V or 240V Heavy Duty Battery, 880 CCA (optional on the 247B Series 3) Oil, Hydraulic, Cold Operation Door, Glass or Polycarbonate Self-Leveling Paint, Custom

### **B-Series 3 Compact Track and Multi Terrain Loaders**

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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