# 349D2L

**Hydraulic Excavator** 





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 Engine Model
 Cat® C13 ACERT™

 Engine Power (ISO 14396)
 301 kW
 403 hp

 Net Power (SAE J1349/ISO 9249)
 289 kW
 387 hp

## Weights

Operating Weight
Long Undercarriage

### **349D2 L Differentiating Features**

### **Engine and Hydraulics**

A powerful Cat C13 ACERT engine combines with a highly efficient hydraulic system to deliver excellent performance with low fuel consumption. In fact, the 349D2 L uses up to 9 percent less fuel than its predecessor moving the same amount of material in optimized Economy Mode.

### **Structures**

Caterpillar design and manufacturing techniques assure you get outstanding durability and service life in the toughest applications.

### **Operator Station**

The spacious ROPS (Roll Over Protective Structure) cab features excellent visibility and easy-to-access switches. ROPS would provide maximum protection in the event of a roll over. The monitor features a full-color graphical display that is easy to see and use. Overall, the new cab provides you with a comfortable working environment for maximum production and efficiency.

#### **Reduced Service and Maintenance Cost**

Routine service and maintenance can be completed quickly and easily to help you reduce ownership costs. Convenient access points, extended service intervals, and advanced filtration help keep downtime to a minimum.

## **Complete Customer Support**

Your Cat dealer offers a wide range of services that can be set up under a customer support agreement when you purchase your equipment.

### **Cat 349D2 L Total Solutions**

Caterpillar and its extensive dealer network offer a wide variety of solutions designed to meet the unique needs of your business.

#### **Contents**

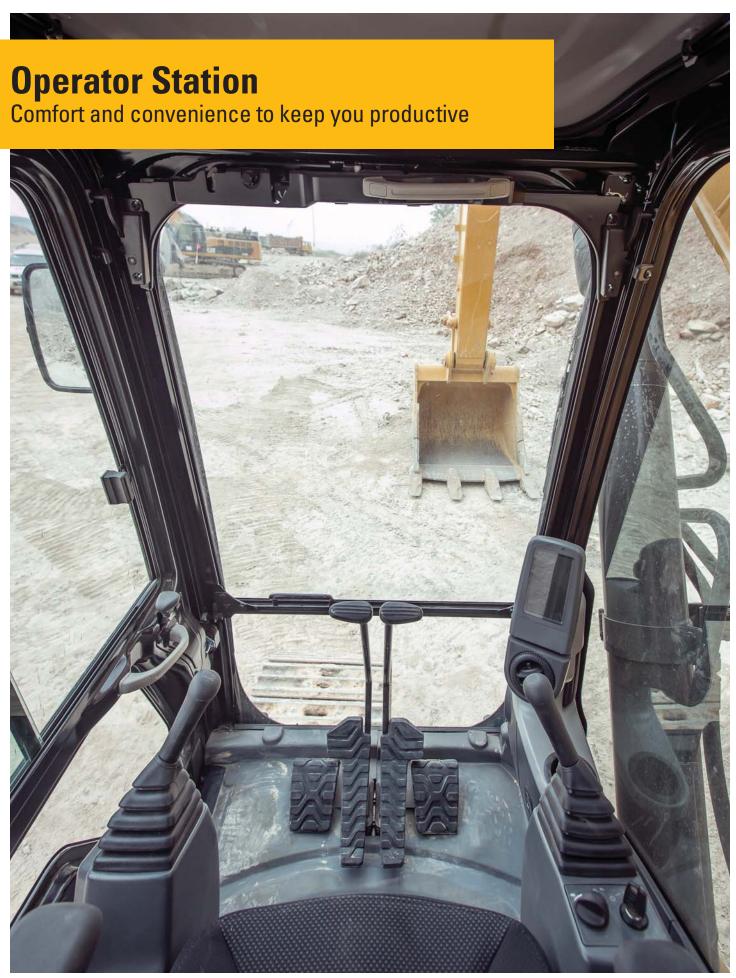
Operator Station

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The 349D2 L offers outstanding performance, excellent control, high stick and bucket forces, impressive lift capacity, simplified service and a comfortable operator station to increase your productivity and lower operating costs.



## **Operator Station**

The ergonomically designed operator station is spacious, quiet, and comfortable, assuring high productivity during a long work day. All switches are located in front of the operator for convenient access.

### **Cab Structure and Mounts**

The cab shell is attached to the frame with viscous rubber mounts, which dampen vibrations and sound levels while enhancing your comfort. Thick steel tubing along the bottom perimeter improves the cab's resistance to fatigue and vibration.

### **Cab Exterior – Roll Over Protective Structure (ROPS)**

The 349D2 L features a ROPS (Roll Over Protective Structure) compliant cab structure as standard. This design also allows for a Falling Object Guard System (FOGS) or front windshield guard to be bolted directly to the cab, either at the factory or in the field, enabling the machine to meet all job site requirements.

- More glass versus previous non-ROPS cab to improve visibility
- Volume increase: more interior head room space
- Improved cab pressurization
- ROPS cab air filter accessible at ground level

### Seat

The suspension seat provides a variety of adjustments to accommodate a wide range of operators. The seat includes a reclining back, upper and lower seat slide adjustments, and height and tilt adjustments to meet your needs for comfort and productivity.

### **Monitor**

The monitor is a full-color Liquid Crystal Display (LCD) that has the capability of displaying information in 28 languages.

## **Joystick Control and Console**

Low-effort pilot-operated joystick controls are designed to match your natural wrist and arm position for maximum comfort and minimum fatigue. The right and left joystick console can be adjusted to meet your individual preferences, improving overall comfort and productivity during the course of a long work day.

### **Climate Control**

Positive filtered ventilation with a pressurized cab is standard. Fresh air or re-circulated air can be selected with a switch on the left console.

## **Windows and Wipers**

All glass is affixed directly to the cab to maximize visibility, eliminating window frames. The upper front windshield opens, closes, and stores on the roof above the operator with a one-touch action release system. Pillar-mounted wipers increase your viewing area and offer continuous and intermittent modes.









## **Turbocharger**

The Cat C13 ACERT uses a wastegate turbocharger for improved performance.

- The wastegate valve controls excessive engine boost pressure by allowing exhaust to bypass the exhaust-side turbine.
- The wastegate also reduces turbine wear in high RPM; low load conditions and optimizes air and fuel delivery for peak engine performance.
- The turbocharger increases the density of the air, enabling the engine to produce more power with few effects from altitude.

## **Engine**

## Engineered to lower your operating costs

349D2 L owning and operation costs have been reduced by reverting to optimized Economy Mode each time the machine is started regardless of what mode the operator had previously selected. This will help to reduce fuel consumption up to 9 percent than its predecessor moving the same amount of material.

## **Emission Standards**

The Cat C13 ACERT engine incorporates proven robust components and precision manufacturing you can count on for reliable and efficient operation.

### **Fuel System**

The Cat C13 ACERT features electronic controls that govern the mechanically actuated unit fuel injection (MEUI<sup>TM</sup>) system. MEUI provides the high-pressure required to deliver better fuel economy through finer fuel atomization and more complete combustion.

## ADEM™ A4 Engine Controller

The ADEM A4 electronic control module manages fuel delivery to get the best performance per liter of fuel used.

The engine management system provides flexible fuel mapping, allowing the engine to respond quickly to varying application needs. It tracks engine and machine conditions while keeping the engine operating at peak efficiency.

## **Air Cleaner**

The radial seal air filter features a doublelayered filter core for more efficient filtration and is located in a compartment behind the cab. A warning is displayed on the monitor when dust accumulates above a preset level.

### **Low Sound and Vibration Levels**

The engine mounts are rubber-isolating mounts matched with the engine package to provide optimum sound and vibration reduction. Further noise reduction has been achieved through design changes to the isolated top cover, oil pan, multiple injection strategy, insulated timing cover, sculpted crankcase.



## **Pilot System**

An independent pilot pump enables smooth, precise control for the front linkage, swing, and travel operations.

### **Component Layout**

The component location and hydraulic system design provide the highest level of system efficiency. The main pumps, control valve and hydraulic tank are located as close to each other as possible. This design makes it possible to use shorter tubes and lines between components, reducing friction losses and pressure drops.

## **Hydraulic Cross-Sensing System**

The hydraulic cross sensing system utilizes each of two hydraulic pumps to 100 percent of engine power under all operating conditions. This improves productivity with faster implement speeds and quicker, stronger pivot turns.

## Boom and Stick Regeneration Circuits

A hydraulically operated stick regeneration circuit saves energy and improves multifunction performance during the stick-in operation. The boom regeneration circuit is operated electrically, and this system is managed by the machine ECM. The system improves cycle times and fuel efficiency, increasing your productivity and reducing operating costs.

## **Boom and Swing Priority**

The hydraulic system on the 349D2 L provides automatic priority function for boom-up and swing operations eliminating the need for work mode buttons. When the boom or swing lever is activated, the system automatically assigns priority based on operator demand.

## **Hydraulic Cylinder Snubbers**

Snubbers are located at the rod-end of the boom cylinders and both ends of the stick cylinders to cushion shocks while reducing sound levels and extending component and structure life.

## **Structures and Undercarriage**

Designed to work in your tough, heavy-duty applications



### **Main Frame**

The X-shaped, box-section carbody provides excellent resistance to torsional bending, and press-formed, robot-welded track roller frames provide exceptional strength and durability.

### **Rollers and Idlers**

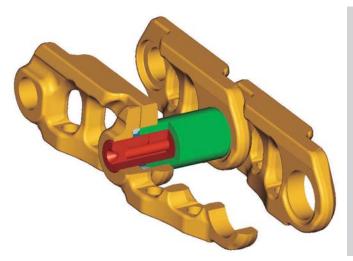
Sealed and lubricated track rollers, carrier rollers, and idlers provide excellent service life to keep your machine in the field and working longer.

## Track Roller Frame Fixed Gauge Undercarriage

 Uses a press-formed, pentagonal section for the track frame that is robot-welded for weld consistency and quality. The track frame has been designed so that the top of the track frame has a steep angle to help prevent accumulation of mud and debris.

## **Counterweights**

The standard 9.0 mt (9.9 t) counterweight maintains large lifting capacity and excellent stability. It's bolted directly to the main frame for extra rigidity.



### Track

Durable Cat undercarriage absorbs stress and provides excellent stability. The 349D2 L comes standard with grease lubricated tracks. The track links are assembled and sealed with grease to decrease internal bushing wear, reduce travel noise and extend service life lowering operating costs.

## **Front Linkage**

## Options to take on your far-reaching or up-close tasks

### **Booms and Sticks**

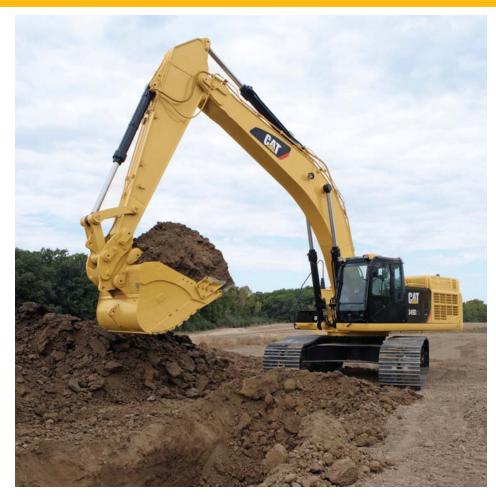
The 349D2 L is offered with a range of booms and sticks. Each is built with internal baffle plates and stress-relieved for added durability, and each undergoes ultrasound inspection to ensure quality and reliability. Large box-section structures with thick, multi-plate fabrications, castings, and forgings are used in high-stress areas such as the boom nose, boom foot, boom cylinder, and stick foot to improve durability. Also, the boom nose pin retention method is a captured flag design for enhanced durability.

## **Reach Front Linkage\***

The Reach boom is designed to balance reach, digging force bucket capacity, offering a wide range of applications as digging, loading and trenching.

There are three reach stick options available to meet all your application requirements:

- The 2.9 m (9'6") stick is best used when you are working primarily in truck loading applications to maximize your breakout force and increase your bucket fill factor.
- The 3.35 m (11'0") stick is a versatile option that will meet the needs for most of your construction applications.
- The 3.9 m (12'10") stick is a great choice when you need additional working range like truck loading and deep trenching.



### Mass Front Linkage\*

The mass excavation (ME) front linkage is designed to maximize machine performance through superior digging forces and a larger bucket capacity.

The 6.55 m (21'6") mass excavation boom is reinforced with a large cross section for longer life and durability.

The ME boom has two stick options to meet your demanding applications:

- The 2.5 m (8'2") ME stick is best for bench loading. This option also provides better breakout force for ripper and is ideal for hammer applications.
- The 3.0 m (9'10") ME stick is best when you primarily use high-capacity buckets in truck loading applications to maximize your breakout force.
- \*All booms and sticks have baffle plates.

## **Service and Maintenance**

## Designed to make your maintenance quick and easy

### **Extended Service Intervals**

Extended service and maintenance intervals increase machine availability. The maintenance intervals for engine oil and engine oil filter have been extended to 500 hours.

## **Capsule Filter**

The hydraulic return filters are located in the hydraulic tank. The filter elements are removable without spilling hydraulic oil.

## **Pilot Hydraulic System Filter**

Pilot hydraulic system filter keeps contaminants from the pilot system and is located in the pump compartment.

### **Radial Seal Main Air Cleaner**

Radial seal main air cleaner with precleaner has a doublelayered filter element for more efficient filtration. No tools are required to change the element.

## **Fuel-Water Separator**

The water separator has a primary fuel filter element and is located in the air cleaner compartment for easy access from the ground.

### **Service Points**

Service points are centrally located with easy access to facilitate routine maintenance.

## **Oil Sample and Pressure Ports**

Oil sample and pressure ports provide easy checking of machine condition and are standard on every machine.

## **Greasing Points**

A concentrated remote greasing block on the boom delivers grease to hard-to-reach locations.







## **Product Support**

Cat dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. You can also save money with our line of remanufactured components.

### **Machine Selection**

Your Cat dealers can provide specific recommendations with detailed comparisons of the Cat machines you are considering before you buy. This ensures you get the right size machine and appropriate work tools to meet all of your application needs.

### **Maintenance Services**

Repair option programs guarantee the cost of repairs up front. Condition monitoring services and diagnostic programs such as scheduled oil sampling, coolant sampling, and technical analysis help you avoid unscheduled repairs.

### **Customer Support Agreements**

Cat dealers offer a variety of product support agreements that can be tailored to meet your specific needs. These plans can cover the entire machine – including attachments – to help protect your investment.

## Replacement

Repair, rebuild, or replace? Your Cat dealers can help you evaluate the costs involved so you can make the right choice.

## **Work Tools**

## Tools to make you productive and profitable





Each Cat work tool is designed to optimize the versatility and performance of your machine. An extensive range of buckets, compactors, grapples, multi-processors, rippers, crushers, pulverizers, hammers, and shears is available for your 349D2 L.

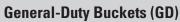


### **Buckets and GET**

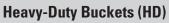
Cat buckets and Cat Ground Engaging Tools (GET) are designed and matched to the machine to ensure optimal performance and fuel efficiency.

## **Utility Buckets (UD)**

UD buckets are for digging in low-impact, low-abrasive material such as dirt, loam, and clay.



GD buckets are for digging in low-impact, moderately abrasive materials such as dirt, loam, gravel, and clay.



HD buckets are a good starting point when application conditions vary – especially when conditions include mixed dirt, clay, sand, and gravel.

## **Severe-Duty Buckets (SD)**

SD buckets are best suited to highly abrasive materials like shot rock, sand stone, and granite.

## **Extreme-Duty Buckets (XD)**

XD buckets are for extremely abrasive materials like high-quartzite granite.



- 1) Utility Buckets (UD)
- 2) General-Duty Buckets (GD)
- 3) Heavy-Duty Buckets (HD)
- 4) Severe-Duty Buckets (SD)
- 5) Extreme-Duty Buckets (XD)

## **Couplers**

Quick couplers allow one person to change work tools in seconds for maximum performance and flexibility on a job site.

One machine can move rapidly from task to task, and a fleet of similarly equipped machines can share a common work tool inventory.

## Center-Lock™ Pin Grabber Coupler

Center-Lock is a pin grabber coupler and features a patent-pending locking system. A highly visible secondary lock clearly shows the operator when the coupler is engaged or disengaged from the bucket or work tool.

### **E Series Hammers**

E Series hammers bring together customer expectations for performance, quality, and serviceability along with Caterpillar manufacturing expertise. They are also quiet — a significant benefit in urban and noise-restricted work areas.

## Rippers

Constructed from high-strength steels and built to last, Cat rippers endure in the toughest conditions. The box-section structure is reinforced for maximum rigidity, transmitting the full machine power to the material being ripped. Rippers feature a replaceable wear tip, and most models also come equipped with a replaceable shank protector.

## **Grapples**

Cat grapples make Cat excavators the ideal machine for handling loose material, sorting trash, and demolition site cleanup. An array of styles and sizes is available to match excavators to the task at hand.

### **Multi-Processors**

Multi-processors do the work of many types of demolition tools by use of interchangeable jaw sets. Changing jaws allows a single unit to crush, pulverize, and perform a variety of specialized tasks such as cutting steel rebar and tanks.

### **Shears**

Cat shears are designed to take full advantage of the hydraulic flows and pressures produced by Cat excavators – all to enhance productivity without compromising safety or causing premature wear of the shear or carrier.

### **Pulverizers**

Mechanical pulverizers are cost-effective tools for recycling demolished concrete debris. The bucket cylinder on the excavator powers the pulverizer, eliminating the need for a dedicated cylinder, associated hydraulics, and additional installation cost.

## **Compactors**

Cat compactors make job site compaction quick, efficient, and cost effective.

### **Crushers**

The hydraulic concrete crusher is well suited for demolition in residential areas. The tool combines several demolition operations in one piece of equipment:

- Breaking out concrete from fixed structures
- Pulverizing concrete
- Cutting reinforcement rods and small steel profiles







## **Integrated Technologies**

Monitor, manage, and enhance job site operations





Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology-equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offers improvements in these key areas:



Equipment Management – increase uptime and reduce

operating costs.



**Productivity** – monitor production and manage job site efficiency.



**Safety** – enhance job site awareness to keep your people and equipment safe.

## **LINK Technologies**

LINK technologies like Product Link<sup>TM</sup> wirelessly connect you to your equipment, giving you valuable insight into how your machine or fleet is performing. Track location, hours, fuel usage, idle time, and event codes through the online VisionLink® interface so you can make timely, fact-based decisions that can boost job site efficiency and productivity, and lower operating costs.

## **GRADE Technologies**

GRADE technologies like the AccuGrade™ system provide 3D bucket tip position and elevation guidance through the in-cab display indicating precisely where to work and how much to cut or fill.

AccuGrade reduces the need for grade staking and checking, decreases labor costs, and improves job site safety.

### **DETECT Technologies**

DETECT technologies like the rear-vision camera enhance operator awareness by expanding your view of the environment around working equipment. Work with greater confidence and at peak potential while keeping people and assets safe.

Engine		
Engine Model	Cat C13 AC	CERT
Engine Power (ISO 14396)	301 kW	403 hp
Net Power (SAE J1349/ISO 9249)	289 kW	387 hp
Bore	130 mm	5.11 in
Stroke	157 mm	6.18 in
Displacement	12.5 L	762 in <sup>3</sup>

- The Cat C13 ACERT meets exhaust emissions equivalent to U.S. EPA Tier 3, EU Stage IIIA equivalent emission standards.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- The field-proven C13 ACERT engine can work efficiently at altitudes up to 2300 m (7,500 ft).

Weights		
Operating Weight		
Long Undercarriage*	48 185 kg	106,200 lb

\*Long Undercarriage: Counterweight – 9.0 mt (9.9 t), Mass Boom – 6.55 m (21'6"), Stick – M3.0 m (9'10"), Track Shoe – Long Fixed Gauge, 900 mm (35 in) Triple Grouser, Bucket – UB2.4 m³ (3.16 yd³)

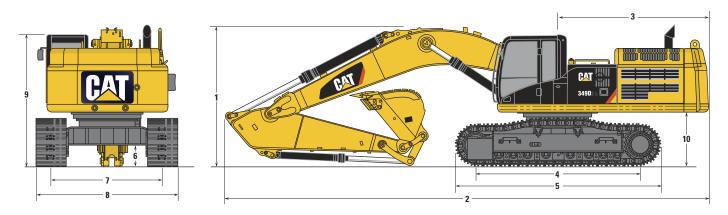
Track	
Number of Shoes (each side)	
Long – Fixed	52
Number of Track Rollers (each side)	
Long – Fixed	9
Number of Carrier Rollers (each side)	
Long – Fixed	2

Swing Mechanism		
Swing Speed	8.7 rpm	
Swing Torque	149 kN·m	109,896 lbf-ft
Drive		
Maximum Travel Speed	4.5 km/h	2.7 mph
Maximum Drawbar Pull	338 kN	75,985 lbf
Hydraulic System		
Main System – Maximum Flow (Total)	734 L/min	193 gal/min
Maximum Pressure – Equipment	35 000 kPa	5,076 psi
Maximum Pressure – Travel	35 000 kPa	5,076 psi
Maximum Pressure – Swing	31 400 kPa	4,554 psi
Pilot System - Maximum Flow	43 L/min	11.3 gal/min
Pilot System - Maximum Flow	43 L/min	2,623 in <sup>3</sup> /min
Pilot System – Maximum Pressure	4110 kPa	596 psi
Boom Cylinder – Bore	160 mm	6.0 in
Boom Cylinder – Stroke	1575 mm	62.0 in
Stick Cylinder – Bore	190 mm	7.0 in
Stick Cylinder – Stroke	1778 mm	70.0 in
TB Bucket Cylinder – Bore	160 mm	6.0 in
TB Bucket Cylinder – Stroke	1356 mm	53.0 in
UB Bucket Cylinder – Bore	170 mm	6.0 in
UB Bucket Cylinder – Stroke	1396 mm	55.0 in
Service Refill Capacities		
Fuel Tank Capacity	705 L	186 gal
Cooling System	35.5 L	9 gal
Engine Oil (with filter)	42 L	11 gal
Swing Drive (each)	10 L	2 gal
Final Drive (each)	15 L	3 gal
Hydraulic System (including tank)	570 L	150 gal
Hydraulic Tank	243 L	64 gal
Sound Performance		
Performance		J1166 MAY90 A and MSHA ats
Operator Sound (ISO 6396)*	72 dB(A)	
Spectator Sound (ISO 6395)*	105 dB(A)	

- \*For Turkey/Korea/Hong Kong model meets EU Stage II Sound Regulation
- When properly installed and maintained, the cab offered by Caterpillar, when tested with doors and windows closed according to ISO 6396, meets requirements for operator sound exposure limits in effect at time of manufacture.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/ windows open) for extended periods or in noisy environment.

## **Dimensions**

All dimensions are approximate.

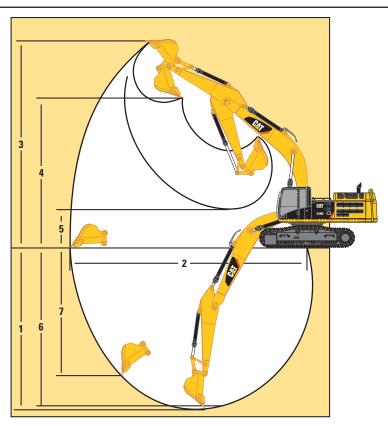


Boom Options		Mass Boom 6.55 m (21'6")			
Stick Options	R2.9TB (9'6")	R3.35TB (11'0")	R3.9TB (12'10")	M2.5UB (8'2")	M3.0UB (9'10")
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)
1 Shipping Height	3700 (12'2")	3690 (12'1")	3660 (12'0")	3960 (13'0")	4020 (13'2")
2 Shipping Length	11 870 (38'11")	11 940 (39'2")	11 950 (39'2")	11 710 (38'5")	11 640 (38'2")
3 Tail Swing Radius	3770 (12'4")	3770 (12'4")	3770 (12'4")	3770 (12'4")	3770 (12'4")
4 Length to Center of Idler and Sprocket					
Long Fix Undercarriage	4360 (14'4")	4360 (14'4")	4360 (14'4")	4360 (14'4")	4360 (14'4")
5 Track Length					
Long Fix Undercarriage	5360 (17'7")	5360 (17'7")	5360 (17'7")	5360 (17'7")	5360 (17'7")
6 Ground Clearance*					
Long Fix Undercarriage	510 (1'8")	510 (1'8")	510 (1'8")	510 (1'8")	510 (1'8")
7 Track Gauge					
Long Fix Undercarriage	2740 (9'0")	2740 (9'0")	2740 (9'0")	2740 (9'0")	2740 (9'0")
8 Transport Width					
Long Fix Undercarriage					
600 mm (24 in) Shoes	3340 (10'11")	3340 (10'11")	3340 (10'11")	3340 (10'11")	3340 (10'11")
750 mm (30 in) Shoes	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")	3490 (11'5")
900 mm (35 in) Shoes	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")
<b>9</b> Cab Height					
Long Fix Undercarriage	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")	3640 (11'11")
10 Counterweight Clearance**					
Long Fix Undercarriage	1320 (4'4")	1320 (4'4")	1320 (4'4")	1320 (4'4")	1320 (4'4")

<sup>\*</sup>Including shoe lug height.

<sup>\*\*</sup>Without shoe lug height.

## **Working Ranges**



Boom Options		Reach Boom 6.9 m (22'8")	Mass Boom 6.55 m (21'6")		
Stick Options	R2.9TB (9'6")	R3.35TB (11'0")	R3.9TB (12'10")	M2.5UB (8'2")	M3.0UB (9'10")
	mm (ft)	mm (ft)	mm (ft)	mm (ft)	mm (ft)
1 Maximum Digging Depth	7150 (23'5")	7600 (24'11")	8150 (26'9")	6720 (22'1")	7220 (23'8")
2 Maximum Reach at Ground Level	11 240 (36'11")	11 660 (38'3")	12 080 (39'8")	10 710 (35'2")	11 180 (36'8")
3 Maximum Cutting Height	10 620 (34'10")	10 800 (35'5")	10 710 (35'2")	10 230 (33'7")	10 420 (34'2")
4 Maximum Loading Height	7290 (23'11")	7470 (24'6")	7450 (24'5")	6620 (21'9")	6810 (22'4")
5 Minimum Loading Height	3250 (10'8")	2800 (9'2")	2250 (7'5")	3160 (10'4")	2660 (8'9")
<b>6</b> Maximum Depth Cut for 2440 mm (8'0") Level Bottom	6990 (22'11")	7460 (24'6")	8020 (26'4")	6550 (21'6")	7070 (23'2")
7 Maximum Vertical Wall Digging Depth	5870 (19'3")	6300 (20'8")	6460 (21'2")	4920 (16'2")	5380 (17'8")

## **Operating Weight and Ground Pressure**

	Double G	600 mm (24 in) Double Grouser Shoes		600 mm (24 in) 750 mm (30 Triple Grouser Double Gro Shoes Shoes		rouser Triple Gr		Grouser Triple Gr		rouser
	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
Long Fix Undercarriage										
Reach Boom – 6.9 m (22'8")										
R2.9TB (9'6")	44 500	77.2	44 400	77.0	44 500	61.8	45 200	62.6	45 900	53.1
	(98,100)	(11.19)	(97,900)	(11.16)	(98,100)	(8.95)	(99,600)	(9.09)	(101,200)	(7.69)
R3.35TB (11'0")	44 400	77.1	44 300	76.9	44 500	61.7	45 100	62.5	45 800	53.0
	(97,900)	(11.16)	(97,700)	(11.14)	(98,100)	(8.95)	(99,400)	(9.07)	(101,000)	(7.67)
R3.9TB (12'10")	44 400	77.0	44 300	76.8	44 500	61.7	45 100	62.5	45 800	53.0
	(97,900)	(11.16)	(97,700)	(11.14)	(98,100)	(8.95)	(99,400)	(9.07)	(101,000)	(7.67)
Mass Boom – 6.55 m (21'6")										
M2.5UB (8'2")	45 800	79.4	45 700	79.2	45 800	63.6	46 400	64.4	47 200	54.5
	(101,000)	(11.51)	(100,800)	(11.49)	(101,000)	(9.21)	(102,300)	(9.35)	(104,100)	(7.91)
M3.0UB (9'10")	45 900	79.5	45 800	79.4	45 900	63.7	46 500	64.5	47 300	54.6
	(101,200)	(11.54)	(101,000)	(11.51)	(101,200)	(9.23)	(102,500)	(9.35)	(104,300)	(7.93)

## **Major Component Weights\***

	kg (lb)
Base Machine (with boom cylinder, without counterweight, front linkage and track)	
Long Fix Undercarriage	23 001 (50,700)
Counterweight	
9.0 mt (9.9 t)	9000 (19,800)
Boom (includes lines, pins and stick cylinder)	
Reach Boom – 6.9 m (22'8")	4081 (9,000)
Mass Boom – 6.55 m (21'6")	4602 (10,100)
Stick (includes lines, pins and bucket cylinder)	
R2.9TB (9'6")	1952 (4,300)
R3.35TB (11'0")	1994 (4,400)
R3.9TB (12'10")	2119 (4,700)
M2.5UB (8'2")	2189 (4,800)
M3.0UB (9'10")	2370 (5,200)
Track Shoe (Standard Undercarriage/per two tracks)	
750 mm (30 in) Triple Grouser Shoes	5529 (12,200)
Track Shoe (Long Fix Undercarriage/per two tracks)	
600 mm (24 in) Double Grouser Shoes	5222 (11,500)
600 mm (24 in) Triple Grouser Shoes	5117 (11,300)
750 mm (30 in) Double Grouser Shoes	6006 (13,200)
750 mm (30 in) Triple Grouser Shoes	5868 (12,900)
900 mm (35 in) Triple Grouser Shoes	6620 (14,600)
Buckets	
TB1758X – 2.2 m³ (2.88 yd³)	1922 (4,200)
UB1729X – 2.4 m³ (3.16 yd³)	2326 (5,100)

<sup>\*</sup>Base machine includes 75 kg (165 lb) operator weight, 90% fuel weight, and undercarriage with center guard.

**Note:** All weights are rounded up to nearest 10 kg and lb except for quick coupler and buckets. Kg and lb were rounded up separately so some of the kg and lb do not match.

## **Bucket and Stick Forces**

Reach Boom 6.9 m (22'8")	R3.9T	B (12'10")	R3.351	ΓB (11'0")	R2.9TB (9'6")	
	kN	(lbf)	kN	(lbf)	kN	(lbf)
TB-Family Bucket						
Heavy Duty						
Bucket Digging Force (ISO)	267	(60,100)	267	(60,100)	267	(60,100)
Stick Digging Force (ISO)	184	(41,400)	201	(45,200)	221	(49,600)
Bucket Digging Force (SAE)	238	(53,500)	238	(53,500)	238	(53,500)
Stick Digging Force (SAE)	180	(40,400)	195	(43,900)	214	(48,100)
Severe Duty						
Bucket Digging Force (ISO)	267	(60,100)	267	(60,100)	267	(60,100)
Stick Digging Force (ISO)	184	(41,400)	201	(45,200)	221	(49,600)
Bucket Digging Force (SAE)	238	(53,500)	238	(53,500)	238	(53,500)
Stick Digging Force (SAE)	180	(40,400)	195	(43,900)	214	(48,100)

/lass Boom 6.55 m (21'6")	M3.0U	IB (9'10")	M2.5UB (8'2")		
	kN	(lbf)	kN	(lbf)	
UB-Family Bucket					
General Duty					
Bucket Digging Force (ISO)	298	(66,900)	298	(66,900)	
Stick Digging Force (ISO)	211	(47,300)	239	(53,700)	
Bucket Digging Force (SAE)	258	(57,900)	258	(57,900)	
Stick Digging Force (SAE)	201	(45,200)	226	(50,900)	
Heavy Duty					
Bucket Digging Force (ISO)	295	(66,300)	295	(66,300)	
Stick Digging Force (ISO)	210	(47,200)	238	(53,500)	
Bucket Digging Force (SAE)	256	(57,400)	256	(57,400)	
Stick Digging Force (SAE)	200	(45,000)	226	(50,700)	
Severe Duty					
Bucket Digging Force (ISO)	290	(65,200)	290	(65,200)	
Stick Digging Force (ISO)	211	(47,500)	239	(53,800)	
Bucket Digging Force (SAE)	252	(56,600)	252	(56,600)	
Stick Digging Force (SAE)	203	(45,700)	229	(51,500)	

## Reach Boom (Long Fix Undercarriage) Lift Capacities - Counterweight: 9.0 mt (9.9 t) - Heavy Lift: Off

3.35 m (11	'O") <i>-</i>	R3.35TB	double grouser									0 mm (14'4")		
5	₽_	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/	20.0 ft	7.5 m/	25.0 ft	9.0 m/s	30.0 ft			
	<u> </u>													m ft
9.0 m <b>30.0 ft</b>	kg <b>Ib</b>											*8300 <b>*18,450</b>	*8300 <b>*18,450</b>	7.3 <b>24.0</b>
7.5 m <b>25.0 ft</b>	kg <b>Ib</b>							*9950 <b>*21,850</b>	*9950 <b>*21,850</b>			*7800 <b>*17,250</b>	*7800 <b>*17,250</b>	8.5 <b>28.0</b>
6.0 m <b>20.0 ft</b>	kg <b>Ib</b>							*10 400 <b>*22,650</b>	*10 400 <b>*22,650</b>	*9750 <b>*18,650</b>	7850 <b>16,800</b>	*7650 <b>*16,900</b>	7450 <b>16,500</b>	9.3 <b>31.0</b>
4.5 m <b>15.0 ft</b>	kg <b>Ib</b>			*17 350 <b>*37,250</b>	*17 350 <b>*37,250</b>	*13 300 <b>*28,750</b>	*13 300 <b>*28,750</b>	*11 250 <b>*24,400</b>	10 200 <b>21,950</b>	*10 050 <b>*21,900</b>	7700 <b>16,500</b>	*7750 <b>*17,050</b>	6700 <b>14,800</b>	9.8 <b>32.0</b>
3.0 m <b>10.0 ft</b>	kg <b>Ib</b>			*21 250 <b>*45,650</b>	20 150 <b>43,550</b>	*15 200 <b>*32,750</b>	13 400 <b>28,900</b>	*12 250 <b>*26,500</b>	9750 <b>21,000</b>	*10 500 <b>*22,850</b>	7450 <b>16,000</b>	*8100 <b>*17,750</b>	6300 <b>13,900</b>	10.0 <b>33.0</b>
1.5 m <b>5.0 ft</b>	kg <b>Ib</b>			*17 600 <b>*42,150</b>	*17 600 <b>40,850</b>	*16 600 <b>*35,900</b>	12 700 <b>27,400</b>	*13 050 <b>*28,300</b>	9350 <b>20,100</b>	*10 950 <b>*23,700</b>	7200 <b>15,550</b>	*8650 <b>*19,000</b>	6150 <b>13,600</b>	10.0 <b>33.0</b>
0 m <b>0 ft</b>	kg <b>Ib</b>			*19 850 <b>*46.050</b>	18 550 <b>39.900</b>	*17 250 <b>*37.300</b>	12 250 <b>26,450</b>	*13 500 <b>*29.250</b>	9050 <b>19,500</b>	*11 100 <b>*24.000</b>	7050 <b>15,200</b>	*9550 <b>*21.050</b>	6300 <b>13,800</b>	9.8 <b>32.0</b>
-1.5 m - <b>5.0 ft</b>	kg <b>lb</b>	*14 100 <b>*31,900</b>	*14 100 <b>*31,900</b>	*22 350 <b>*48,550</b>	18 500 <b>39,750</b>	*16 950 <b>*36,750</b>	12 100 <b>26,050</b>	*13 350 <b>*28,900</b>	8900 <b>19,200</b>	*10 700 <b>*23,050</b>	7000 <b>15,100</b>	*10 150 * <b>22,350</b>	6700 <b>14,750</b>	9.3 <b>31.0</b>
−3.0 m − <b>10.0 ft</b>	kg <b>Ib</b>	*22 600 <b>*51,000</b>	*22 600 <b>*51,000</b>	*20 300 * <b>43,950</b>	18 700 <b>40,150</b>	*15 750 <b>*34,050</b>	12 150 <b>26,150</b>	*12 400 <b>*26.600</b>	8950 <b>19,250</b>		10,100	*10 200 * <b>22,400</b>	7550 <b>16,700</b>	8.6 <b>28.0</b>
−4.5 m <b>−15.0 ft</b>	kg <b>Ib</b>	*21 200 <b>*45,650</b>	*21 200 <b>*45,650</b>	*16 850 <b>*36,200</b>	*16 850 <b>*36,200</b>	*13 200 <b>*28,200</b>	12 400 <b>26,750</b>					*9850 <b>*21,650</b>	9350 <b>20,850</b>	7.4 <b>24.0</b>
		* [	<u>'</u>				ISO 1056	7						

<sup>\*</sup>Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

## Reach Boom (Long Fix Undercarriage) Lift Capacities – Counterweight: 9.0 mt (9.9 t) – Heavy Lift: Off

3.35 m (11	'0") -	R3.35TB		6.9 m (	(22'8")		<b>→</b>		mm (30 in) ole grouser				0 mm (14'4") 0 mm (17'7")	
5	₽	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/	20.0 ft	7.5 m/	25.0 ft	9.0 m/	30.0 ft			
	<u> </u>													m ft
9.0 m <b>30.0 ft</b>	kg <b>Ib</b>											*8300 <b>*18,450</b>	*8300 <b>*18,450</b>	7.3 <b>24.0</b>
7.5 m	kg							*9950	*9950			*7800	*7800	8.5
25.0 ft	lb							*21,850	*21,850			*17,250	*17,250	28.0
6.0 m <b>20.0 ft</b>	kg <b>lb</b>							*10 400 <b>*22,650</b>	*10 400 <b>*22,650</b>	*9750 <b>*18.650</b>	7950 <b>17,000</b>	*7650 <b>*16.900</b>	7550 <b>16.700</b>	9.3 <b>31.0</b>
4.5 m	kg			*17 350	*17 350	*13 300	*13 300	*11 250	10 300	*10 050	7750	*7750	6800	9.8
15.0 ft	lb			*37.250	*37,250	*28.750	*28,750	* <b>24,400</b>	<b>22.200</b>	* <b>21.900</b>	16,700	*17.050	15.000	32.0
3.0 m	kg			*21 250	20 400	*15 200	13 550	*12 250	9850	*10 500	7550	*8100	6400	10.0
10.0 ft	ΙĎ			*45,650	44,050	*32,750	29,250	*26,500	21,250	*22,850	16,200	*17,750	14,100	33.0
1.5 m	kg			*17 600	*17 600	*16 600	12 850	*13 050	9450	*10 950	7300	*8650	6250	10.0
5.0 ft	lb			*42,150	41,350	*35,900	27,700	*28,300	20,400	*23,700	15,750	*19,000	13,750	33.0
0 m	kg			*19 850	18 800	*17 250	12 450	*13 500	9150	*11 100	7150	*9550	6350	9.8
<b>0 ft</b> 1.5 m	lb kg	*14 100	*14 100	* <b>46,050</b> *22,350	<b>40,400</b> 18 750	* <b>37,300</b> *16 950	<b>26,800</b> 12 250	<b>*29,250</b> *13 350	<b>19,750</b> 9050	<b>*24,000</b> *10 700	<b>15,400</b> 7100	<b>*21,050</b> *10 150	<b>14,000</b> 6750	<b>32.0</b> 9.3
-1.5 III - <b>5.0 ft</b>	lb	*31,900	*31,900	*48.550	40,250	* <b>36,750</b>	26,400	* <b>28,900</b>	19,450	* <b>23,050</b>	15.300	* <b>22,350</b>	14,950	31.0
-3.0 m	kg	*22 600	*22 600	*20 300	18 900	*15 750	12 300	*12 400	9050		,	*10 200	7650	8.6
-10.0 ft	lb	*51,000	*51,000	*43,950	40,650	*34,050	26,500	*26,600	19,550			*22,400	16,900	28.0
–4.5 m	kg	*21 200	*21 200	*16 850	*16 850	*13 200	12 550					*9850	9450	7.4
–15.0 ft	lb	*45,650	*45,650	*36,200	*36,200	*28,200	27,100					*21,650	21,100	24.0
		* [	_				ISO 1056	7						

<sup>\*</sup>Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

## Mass Boom (Long Fix Undercarriage) Lift Capacities – Counterweight: 9.0 mt (9.9 t) – Heavy Lift: Off

3.0 m (9'	10") -	M3.0UB		6.55 m	(21'6")		<b>→</b>		mm (24 in) uble grouse	r			0 mm (14'4") 0 mm (17'7")	
5	•	3.0 m/	10.0 ft	4.5 m/	15.0 ft	6.0 m/	20.0 ft	7.5 m/2	25.0 ft	9.0 m/s	30.0 ft			
	<u> </u>													m <b>ft</b>
7.5 m <b>25.0 ft</b>	kg <b>lb</b>							*10 600	10 350			*9200 <b>*20.350</b>	*9200 <b>*20.350</b>	7.7 <b>25.0</b>
6.0 m	kg							*10 700	10 200			*8950	8150	8.5
20.0 ft	lb							*23,400	21,950			*19,750	18,150	28.0
4.5 m	kg			*17 350	*17 350	*13 400	*13 400	*11 400	9850	*9900	7300	*9050	7200	9.1
15.0 ft 3.0 m	lb			*37,300 *21 050	* <b>37,300</b> 19 750	<b>*29,000</b> *15 100	* <b>29,000</b> 13 050	<b>*24,750</b> *12 250	<b>21,200</b> 9400	*10 600	7100	<b>*19,900</b> *9450	<b>15,950</b> 6700	<b>30.0</b> 9.3
3.0 III <b>10.0 ft</b>	kg <b>Ib</b>			* <b>45.250</b>	42,650	* <b>32,650</b>	28,150	* <b>26,550</b>	<b>20,250</b>	* <b>23.000</b>	15,300	* <b>20,750</b>	14,800	31.0
1.5 m	kg			*21 700	18 500	*16 450	12 350	*12 950	9000	*10 850	6900	*10 150	6550	9.3
5.0 ft	lb			*49,800	39,900	*35,550	26,600	*28,050	19,400	*23,500	14,850	*22,350	14,400	31.0
0 m	kg			*23 000	18 100	*16 950	11 900	*13 250	8750	*10 750	6800	*10 600	6700	9.1
0 ft	ΙĎ			*49,900	38,900	*36,650	25,650	*28,700	18,800			*23,350	14,700	30.0
−1.5 m	kg	*16 950	*16 950	*21 750	18 050	*16 500	11 750	*12 900	8600			*10 700	7200	8.6
-5.0 ft	lb	*38,350	*38,350	*47,150	38,850	*35,650	25,300	*27,800	18,600			*23,550	15,900	28.0
-3.0 m	kg	*24 700	*24 700	*19 250	18 300	*14 900	11 850	*11 300	8750			*10 650	8350	7.8
<b>−10.0 ft</b> −4.5 m	lb kg	*53,650	*53,650	* <b>41,650</b> *14 950	<b>39,300</b> *14 950	<b>*32,100</b> *11 300	<b>25,500</b> *11 300	*24,000	18,850			<b>*23,400</b> *9950	<b>18,550</b> *9950	<b>26.0</b> 6.5
-4.5 III - <b>15.0 ft</b>	kg <b>lb</b>			*31,900	*31,900	* <b>23,700</b>	* <b>23,700</b>					* <b>21,750</b>	* <b>21,750</b>	21.0
		* [					ISO 1056	7			,			

<sup>\*</sup>Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with  $\pm 5\%$  for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

## 349D2 L Work Tool Offering Guide\* – Turkey Region

HD Reach Boom	Mass Boom
HD R3.35 (11'0")	M3.0 (9'10")
H160Es	H160Es
H180Es **	H180Es
MP30 CC Jaw	MP30 CC Jaw
MP30 CR Jaw	MP30 CR Jaw
MP30 PP Jaw **	MP30 PP Jaw
MP30 PS Jaw	MP30 PS Jaw
MP30 S Jaw	MP30 S Jaw
MP30 TS Jaw ***	MP30 TS Jaw ^
P335	P335
	P360 *** #
P235	P235
G330	G330
S340B ***	S340B **
S365C ##	S365C ##
S385C ##	S385C ##
The second test	-1.1. f 41 - 240D2 I FC
	ier for proper maten.
	HD R3.35 (11'0")  H160Es H180Es **  MP30 CC Jaw MP30 CR Jaw MP30 PP Jaw ** MP30 PS Jaw MP30 PS Jaw MP30 TS Jaw ***  P335  P235  G330  S340B *** S365C ##

<sup>\*</sup> Offerings not available in all areas. Matches are dependent on excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

<sup>\*\*</sup> Pin-on or CW coupler

<sup>\*\*\*</sup> Pin-on only

<sup>#</sup>Over the front only

<sup>##</sup> Boom mount

<sup>^</sup> Over the front only with CL coupler

## 349D2 L Work Tool Offering Guide\* - Australia and New Zealand Region

Boom Type		HD Reach Boom		Ma	ss Boom
Stick Size	HD R3.9 (12'10")	HD R3.35 (11'0")	HD R2.9 (9'6")	M3.0 (9'10")	M2.5 (8'2")
Hydraulic Hammer	H160Es	H160Es	H160Es	H160Es	H160Es
	H180Es ***	H180Es **	H180Es	H180Es	H180Es
Multi-Processor	MP30 CC Jaw **	MP30 CC Jaw	MP30 CC Jaw	MP30 CC Jaw	MP30 CC Jaw
	MP30 CR Jaw **	MP30 CR Jaw	MP30 CR Jaw	MP30 CR Jaw	MP30 CR Jaw
	MP30 PP Jaw ***	MP30 PP Jaw **	MP30 PP Jaw	MP30 PP Jaw	MP30 PP Jaw
	MP30 PS Jaw **	MP30 PS Jaw	MP30 PS Jaw	MP30 PS Jaw	MP30 PS Jaw
	MP30 S Jaw **	MP30 S Jaw	MP30 S Jaw	MP30 S Jaw	MP30 S Jaw
	MP30 TS Jaw ***	MP30 TS Jaw ***	MP30 TS Jaw	MP30 TS Jaw ^	MP30 TS Jaw
					MP40 CC Jaw *** #
					MP40 CR Jaw *** #
					MP40 S Jaw *** #
Crusher	P335 **	P335	P335	P335	P335
				P360 *** #	P360 ***
Pulverizer	P235 **	P235	P235	P235	P235
Demolition and Sorting Grapple	G330	G330	G330	G330	G330
Mobile Scrap and Demolition Shear	S340B ***	S340B ***	S340B **	S340B **	S340B
	S365C ##	S365C ##	S365C ##	S365C ##	S365C ##
	S385C ##	S385C ##	S385C ##	S385C ##	S385C ##
Orange Peel Grapple					
Clamshells	_			1 240027.50	
Rippers	_		ols are available for our Cat dealer for		
Center-Lock Pin Grabber Coupler	_	Consuit y	our Cat dealer 101	proper matem.	
Dedicated Quick Coupler	_				

<sup>\*</sup> Offerings not available in all areas. Matches are dependent on excavator configurations. Consult your Cat dealer to determine what is offered in your area and for proper work tool match.

<sup>\*\*</sup> Pin-on or CW coupler

<sup>\*\*\*</sup> Pin-on only

<sup>#</sup> Over the front only

<sup>##</sup> Boom mount

<sup>^</sup> Over the front only with CL coupler

## **Bucket Specifications and Compatibility – Turkey Region**

		Wi	dth	Сар	acity	We	ight	Fill	Reach Boom	ME Boom
									R3.35 (11'0")	M3.0 (9'10")
	Linkage	mm	in	m³	yd³	kg	lb	%	600 mm (24 in) DG	600 mm (24 in) DG
Without Pin Grabber Co	upler									
General Duty (GD)	UB	1450	58	2.39	3.13	2324	5,122	100%		•
	UB	2000*	80	3.60	4.71	2881	6,350	100%		O**
Heavy Duty (HD)	ТВ	1500	60	2.41	3.16	2065	4,551	100%	•	
	ТВ	1650	66	2.41	3.15	2210	4,871	100%	$\Theta$	
	TB	1850	74	2.78	3.64	2420	5,334	100%	0	
	UB	1650	65	2.77	3.62	2562	5,647	100%		$\Theta$
	UB	1850	73	3.19	4.16	2735	6,028	100%		0
	UB	1950	77	3.43	4.48	2898	6,387	100%		$\Diamond$
Severe Duty (SD)	ТВ	1900	75	2.78	3.64	2716	5,986	90%	0	
	UB	1450	58	2.39	3.13	2540	5,598	90%		•
	UB	1550	62	2.61	3.41	2648	5,836	90%		$\Theta$
	UB	1650	65	2.77	3.62	2729	6,015	90%		$\Theta$
	UB	1850	73	3.21	4.20	2987	6,583	90%		0
	UB	1950	77	3.43	4.48	3058	6,740	90%		0
Extreme Duty (XD)	ТВ	1700	67	2.41	3.15	2765	6,094	90%	$\Theta$	
	UB	1550	62	2.61	3.41	3091	6,813	90%		$\Theta$
	UB	1650	65	2.77	3.62	3192	7,035	90%		0
	· · · · · · · · · · · · · · · · · · ·			М	aximum load	pin-on (paylo	ad + bucket)	kg	6446	6808
								lb	14,207	15,005

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with Long tips.

#### **Maximum Material Density**

- 2100 kg/m³ (3500 lb/yd³)
- 1800 kg/m³ (3000 lb/yd³)
- → 1500 kg/m³ (2500 lb/yd³)
- 1200 kg/m³ (2000 lb/yd³)
- 900 kg/m³ (1500 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

<sup>\*</sup>This bucket might reduce front structure life.

<sup>\*\*</sup>For light dirt applications only. Consult your dealer to understand your application before using this bucket in combination with this stick.

## **Bucket Specifications and Compatibility – Australia and New Zealand Region**

		Widt		Capacity		We	ight	Fill	Reach Boom	ME Boom		Reach Boom		
									R3.35 (11'0")	M2.5 (8'2")	M3.0 (9'10")	R2.9 (9'6")	R3.35 (11'0")	R3.9 (12'10")
	Linkage	mm	in	m³	yd³	kg	lb	%	750 mm (30 in) DG					
Without Pin Grabbe	r Coupler													
General Duty (GD)	UB	1450	58	2.390	3.13	2324	5,122	100%		•	•			
	UB	1550	62	2.610	3.41	2418	5,329	100%		•	$\Theta$			
Heavy Duty (HD)	TB	1650	66	2.410	3.16	2259	4,979	100%	$\Theta$			•	$\Theta$	$\Theta$
	TB	900	36	1.077	1.41	1563	3,445	100%	•			•	•	•
	TB	1050	42	1.337	1.75	1655	3,648	100%	•			•	•	•
	ТВ	1200	48	1.600	2.09	1814	3,998	100%	•			•	•	•
	TB	1350	54	1.868	2.44	1941	4,278	100%	•			•	•	•
	TB	1500	60	2.140	2.80	2104	4,637	100%	•			•	•	•
	TB	1650	66	2.414	3.16	2266	4,994	100%	θ			•	$\Theta$	$\Theta$
	TB	1800	72	2.692	3.52	2395	5,279	100%	$\Theta$			$\Theta$	$\Theta$	0
Severe Duty (SD)	TB	1400	55	1.870	2.44	2157	4,754	90%	•			•	•	•
			Max	imum loa	d pin-on (	payload +	bucket)	kg	6446	7645	6929	6983	6523	6114
								lb	14,207	16,850	15,272	15,391	14,377	13,475
With Pin Grabber Q	uick Coupl	er												
General Duty (GD)	UB	1450	58	2.390	3.13	2324	5,122	100%		•	•			
	UB	1550	62	2.610	3.41	2418	5,329	100%		•	$\Theta$			
Heavy Duty (HD)	ТВ	1650	66	2.410	3.16	2259	4,979	100%	$\Theta$			•	$\Theta$	$\Theta$
	TB	900	36	1.077	1.41	1563	3,445	100%	•			•	•	•
	TB	1050	42	1.337	1.75	1655	3,648	100%	•			•	•	•
	TB	1200	48	1.600	2.09	1814	3,998	100%	•			•	•	•
	TB	1350	54	1.868	2.44	1941	4,278	100%	•			•	•	•
	TB	1500	60	2.140	2.80	2104	4,637	100%	•			•	•	•
	ТВ	1650	66	2.414	3.16	2266	4,994	100%	$\Theta$			•	$\Theta$	$\Theta$
	ТВ	1800	72	2.692	3.52	2395	5,279	100%	$\Theta$			$\Theta$	$\Theta$	0
Severe Duty (SD)	ТВ	1400	55	1.870	2.44	2157	4,754	90%	•			•	•	•
			Max	imum load	d pin-on (	payload +	bucket)	kg	5613	6812	6096	6150	5690	5281
								lb	12,371	15,014	13,436	13,555	12,541	11,639

The above loads are in compliance with hydraulic excavator standard EN474, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451.

Bucket weight with Long tips.

### **Maximum Material Density**

- 2100 kg/m³ (3500 lb/yd³)
- 1800 kg/m³ (3000 lb/yd³)
- → 1500 kg/m³ (2500 lb/yd³)
- O 1200 kg/m³ (2000 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

## 349D2 L Standard Equipment

## **Standard Equipment**

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

#### **ENGINE**

- Cat C13 ACERT engine
- Meets Tier 3, Stage IIIA equivalent emission standards
- 2300 m (7,500 ft) altitude capability
- Radial seal air filters (primary and secondary filter)
- Glow plugs (for cold weather start)
- Automatic engine speed control with one touch low idle
- High ambient cooling package 52° C (125° F)
- Water separator with water level indicator sensor
- Waved fin radiator with space for cleaning
- Two speed travel
- Electric priming pump
- Fuel pressure differential gauge
- · ECO and HHP

#### **HYDRAULIC SYSTEM**

- · Regeneration circuits for boom and stick
- · Auxiliary hydraulic valve
- Reverse swing damping valve
- Automatic swing parking brake
- Boom drift reducing valve
- Boom lowering device for back-up
- Stick drift reducing valve
- · Straight travel hydraulic circuit
- High performance hydraulic return filters

#### CAB

- · Pressurized ROPS cab
- Fully adjustable mechanical suspension seat
- Adjustable armrest
- Seat belt, retractable (76 mm [3 in] width)
- 70/30 split front windshield
- Laminated upper front windshield and tempered other windows
- Sliding upper door window
- Openable front windshield with assist device
- Pillar mounted upper windshield wiper and washer
- Bi-level air conditioner (automatic) with defroster (pressurized function)
- Color LCD display with warning, filter/ fluid change, and working hour information
- Control lever joysticks
- Hydraulic activation control lever (lock out for all controls)
- Travel control pedals with removable hand levers
- Radio mounting (DIN size)
- · Radio ready
- $12V 2 \times$  maximum 10A power supply
- Two stereo speakers
- · Beverage holder
- Coat hook
- · Openable roof hatch
- · Washable floor mat

#### **UNDERCARRIAGE**

- Idler and center section track guiding guard
- Towing eye on base frame
- Grease lubricated track

### **ELECTRICAL**

- Batteries  $(2 \times 750 \text{ CCA})$
- 75 amp alternator
- 24V 7.5 kW starter motor

#### **LIGHTS**

- · Left boom working light
- Right working light mounted in the storage box
- Interior lighting

#### **SAFETY & SECURITY**

- Cat one key security system
- Door and compartment locks
- Signaling/warning horn
- · Rearview mirrors
- Fire wall between engine and pump compartment
- Emergency engine shutoff switch
- Emergency exit rear window
- · Battery disconnect switch
- · Rearview camera

#### **COUNTERWEIGHT**

• 9.0 mt (9.9 t) counterweight

#### **TECHNOLOGY**

- Product Link
- · Cat Electronic Technician data link

## 349D2 L Optional Equipment

## **Optional Equipment**

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

### **ENGINE**

- Starting kit, cold weather, -32° C (-25.6° F), ether or block heater
- Air prefilter

### **HYDRAULIC SYSTEM**

- Auxiliary hydraulics options
- Hammer circuit, foot pedal operated
- Two way combined circuit, foot pedal operated
- Two way combined circuit, joystick operated
- Two way combined circuit with medium pressure, joystick operated
- Auxiliary hydraulic lines for booms and sticks

### **UNDERCARRIAGE AND GUARDS**

- 600 mm (24 in) double grouser shoes
- 600 mm (24 in) triple grouser shoes
- 750 mm (30 in) double grouser shoes
- 750 mm (30 in) triple grouser shoes
- 900 mm (35 in) triple grouser shoes
- Full length track guiding guard (2 pieces)
- · Guard package

#### **LIGHTS**

- Cab mounted working lights
- Right mounted boom light for reach boom

### **TECHNOLOGY**

• AccuGrade Ready Option (ARO)

#### FRONT LINKAGE

- Booms
- -Reach 6.9 m (22'8")
- Mass 6.55 m (21'6")
- · Sticks
- -Reach 2.9 m (9'6")
- -Reach 3.35 m (11'0")
- -Reach 3.9 m (12'10")
- -Mass 2.5 m (8'2")
- -Mass 3.0 m (9'10")

## Notes

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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