

# Cat<sup>®</sup> 160/ 160 AWD

**Motor Graders** 

The Cat® 160/160 AWD Motor Grader delivers power, efficiency, and operating finesse to the job. Joystick controls provide ergonomic comfort for the operator. This high-performance machine minimizes emissions with the latest control technologies, without loss of productivity.

#### **Performance**

- Programmable Autoshift option simplifies operation by allowing transmission to be programmed to shift at optimal points to match application.
- Power Shift Countershaft Transmission matches to engine, maximizing power to the ground.
- Electronic Throttle Control helps improve productivity by providing best match of horsepower and torque for application demands.

#### **Efficiency**

- Aggressive blade angle, optimized moldboard curvature and large throat clearance allow material to roll more freely along blade, increasing efficiency.
- Hydraulic demand fan automatically adjusts speed according to cooling requirements resulting in more power to the ground and improved fuel efficiency.
- Engine idle shutdown timer is available to shut down engine after a set period of time, saving fuel and helping reduce emissions.

#### Serviceability

- Sacrificial brass wear strips between blade mounting group and moldboard can be easily adjusted and replaced.
- Shimless Moldboard Retention System uses vertical and horizontal adjusting screws to keep moldboard wear strips aligned for reduced blade chatter and precise blade control.
- Optional High Performance Circle (HPC) improves machine
  performance, efficiency, and uptime availability. When paired with
  the Cat-exclusive extended life blade rail wear strips, the HPC
  reduces downtime and total cost of ownership for the drawbar
  circle moldboard. The HPC helps to eliminate hours of regular
  maintenance for frequent inspections, wear strip replacement,
  and circle shoe adjustments associated with conventional circles.
  The fully sealed bearing design in the HPC removes exposure to
  abrasive materials during grading.

#### Comfort

- Control pods can be adjusted electronically, making it easy to set to ideal operating position.
- Standard Cat Comfort Series suspension seat is fully adjustable.
- High capacity heating, ventilation, and air conditioning (HVAC) system dehumidifies and pressurizes cab, sealing out dust and helping keep windows clear.



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#### **Ease of Operation**

- Selectable blade lift modes fine, normal, or coarse allow you to choose the blade lift modulation mode that best fits your application or operating style.
- Joystick controls with electronically adjustable control pods reduce hand and arm movement, helping reduce operator fatigue.
- Left joystick controls steering, articulation, return-to-center, wheel lean, gear selection, left moldboard lift cylinder, and float.
- Right joystick controls drawbar, circle, and moldboard functions as well as electronic throttle control and manual differential lock/ unlock.
- Articulation return-to-center automatically returns machine to a straight frame position from any angle with the touch of a button.
- Rocker and control switches are in easy reach.

### **Technology**

- Shuttle Shift allows smooth, fast direction shifts without requiring manipulating throttle or inching pedal.
- Cat Product Link™ aids equipment management with remote monitoring capabilities.
- Optional Cat Grade Control Cross Slope helps maintain desired cross slope by automatically controlling one side of the blade.
- Optional factory-installed 3D mastless Cat Grade enables operators to improve grading efficiency, accuracy, and productivity in both rough grading and finish grading applications. When mastless grade is installed at factory, E-fence is not included.
- Optional Cat Grade uses positioning and guidance technologies, machine sensors, and automatic blade control to help get to grade faster, easier, and more efficiently.
- Optional Cat Advanced Control Joysticks (ACJs) allow control of automated grading solutions efficiently and safely without removing hands from the joysticks.

#### Safety

- Angled cab doors, tapered engine enclosure, and sloped rear window make it easy to see moldboard and tires, as well as behind the machine.
- Optional rear vision camera enhances sight to the rear of the machine.

# **Standard and Optional Equipment**

Standard and optional equipment may vary. Consult your Cat® dealer for details.

	Standard	Optional
POWERTRAIN		
Demand fan, hydraulic	✓	
Differential Lock/Unlock, Automatic	✓	
Engine Cat® C7 diesel with automatic engine derate and idle control. Note: Brazil MAR-1, equivalent to U.S. EPA Tier 3 and EU Stage IIIA	✓	
Fuel tank, ground-level access and sediment drain	✓	
Tandem drive	✓	
Transmission, 8F/6R, power shift, direct drive	✓	
Transmission, autoshift		✓
Variable Horsepower Plus (VHP Plus)	✓	
ELECTRICAL		
Alarm, back up	$\checkmark$	
Breaker panel, ground accessible	✓	
Electrical system, 24V	✓	
Starter, electric	✓	
OPERATOR ENVIRONMENT		
Accelerator	✓	
Air conditioning with heater	✓	
Arm and wrist rest, electronically adjustable	✓	
Articulation, automatic Return-to-Center	✓	
Coat hook	✓	
Cup holder	✓	
Display, digital speed and gear	✓	
Fan, defroster, rear window		✓
Gauge, machine level	✓	
Gauge cluster (analog) – fuel, articulation, engine coolant temp, engine RPM, hydraulic oil temp	✓	
Joystick hydraulic controls right/left blade lift with float position, circle drive, blade sideshift and tip, centershift, front wheel lean, articulation and steering	✓	
Mirror, inside rearview, wide angle	✓	
Mirrors, outside: heated 24V		✓
Mirrors, outside: mounted		✓
Power port, 12V	✓	
Rollover protective structure (ROPS) cab, sound suppressed	✓	
Seat, cloth-covered, comfort suspension	✓	
Seat belt, retractable	✓	
Shade, sun		✓
Storage area for cooler/lunchbox	✓	
Throttle control, electronic	✓	

	Standard	Optional
OTHER STANDARD EQUIPMENT		
Anti-glare paint	✓	
Bumper, rear, integrated with hitch	✓	
Cutting edges: - 152 $\times$ 16 mm (6 $\times$ 5/8 in) - curved	1	
DH-2 steel - 19 mm (3/4 in) mounting bolts		
Fluid check, ground-level	✓	
Ground-level engine shutdown	✓	
Ground-level fueling	✓	
Horn, electric	✓	
Hydraulic lines for base functions	✓	
Lockout, hydraulic implement (for roading and servicing)	✓	
Moldboard - $3658 \times 610 \times 22$ mm (12 ft $\times$ 24 in $\times$ 7/8 in)	✓	
Pump, hydraulic, high capacity, 98 cm³ (6 in³)	✓	
S·O·S <sup>SM</sup> ports: engine, hydraulic, transmission,	,	
coolant, fuel	✓	
Tool box	✓	
OTHER ACCESSORIES		
Camera, rearview		<b>√</b>
Heater, engine coolant: 120V		<b>√</b>
Heater, engine coolant: 240V		<b>√</b>
Security system		✓
Sound suppression		✓
ATTACHMENTS AVAILABLE FROM FACTORY		
Push block		<b>√</b>
Ripper		✓
Scarifier		✓
Front lift group		<b>√</b>
Top adjust circle		✓
High performance circle		✓
ADDITIONAL ATTACHMENTS		
Snow wings		<b>√</b>
Plows		✓
Blades		√ √
Blade extensions		✓
Brooms		$\checkmark$

# Cat® 160/160 AWD Motor Graders

#### **Technical Specifications**

Powert	rain	
Engine Model	Cat <sup>o</sup>	® C9
Emissions	Brazil MAR-1, U.S. EPA Tier 3 a	equivalent to nd EU Stage IIIA
Base Power (1st gear) – Net	159 kW	213 hp
VHP Plus Range – Net	159-185 kW	213-248 hp
Displacement	8.8 L	537 in <sup>3</sup>
Bore	112 mm	4.4 in
Stroke	149 mm	5.9 in
Torque Rise (VHP Plus)	40	%
Maximum Torque (VHP Plus)	1237 N⋅m	912 lb-ft
Maximum Torque (AWD On)	1344 N⋅m	991 lbf-ft
Speed @ Rated Power	2,000 rpm	
Number of Cylinders	6	5
Derating Altitude	3048 m	10,000 ft
Standard – Maximum Fan Speed	1,450 rpm	
Standard – Minimum Fan Speed	600 rpm	
Standard – Ambient Capability	43° C	109° F
High Ambient – Maximum Fan Speed	1,650 rpm	
High Ambient – Minimum Fan Speed	600 rpm	
High Ambient Capability	50° C	122° F

- Maximum torque (VHP Plus) measured at 1,000 rpm.
- Net power is tested per ISO 9249, SAE J1349, and EEC 80/1269 Standards in effect at the time of manufacture.
- Net power advertised is the power available at rated speed of 2,000 rpm, measured at the flywheel when engine is equipped with fan running at minimum speed, air cleaner, muffler, and alternator.
- Power as declared per ISO 14396 Rated Speed = 2,000 rpm VHP Plus = 175 kW (234 hp)
- AWD = 201 kW (269 hp)
- No engine derating required up to 3048 m (10,000 ft).



Mold	board	
Moldboard – Width	3.7 m	12 ft
Moldboard – Height	610 mm	24 in
Arc Radius	413 mm	16.3 in
Throat Clearance	95.0 mm	3.7 in

	\	Neights		
Gross Vehicle We	ight — Typically E	:quipped*	AV	VD
Total	19 715 kg	43,465 lb	20 607 kg	45,431 lb
Front Axle	5626 kg	12,404 lb	6103 kg	13,455 lb
Rear Axle	14 089 kg	31,061 lb	14 504 kg	31,976 lb

\*Base operating weight on standard machine configuration is calculated with full fuel tank, coolant, lubricants, operator and 17.50R25 tires with multi-piece (MP) rims. Base operating weight (AWD) on standard machine configuration is calculated with full fuel tank, coolant, lubricants, operator and 14.0R24 tires with multi-piece (MP) rims.

e	
728 mm	28.7 in
695 mm	27.4 in
950 mm	37.4 in
820 mm	32.3 in
40 degrees	
5 degrees	
2278 mm	89.7 in
2090 mm	82.3 in
452 mm	17.9 in
750 mm	29.5 in
	728 mm 695 mm 950 mm 820 mm 40 degre 5 degre 2278 mm 2090 mm 452 mm

### **Air Conditioning System**

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. See the label or instruction manual for identification of the gas.
- If equipped with R134a (Global Warming Potential = 1430), the system contains 1.8 kg (4.0 lb) of refrigerant which has a  $CO_2$  equivalent of 2.574 metric tonnes (2.837 tons).

AEXQ4452-00 (07-2025) Build Number: 14A (Aus-NZ, Afr-ME, Eurasia, SE Asia, S Am)

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

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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