



CUSTOM PRODUCT BY CATERPILLAR

140G

CAT® ALL WHEEL DRIVE MOTOR GRADER

The 140G All Wheel Drive improves motor grader performance in traction limited applications through:

- **Horsepower** — increased to 134 kW (180 HP).
- **High Working Speeds** — up to 25.7 km/h (16 MPH) for snow.
- **Increased ditch cutting and front end slope control.**
- **Improved steering** — less front end drift, and improved side draft control.

A manual lever allows the operator to vary front wheel torque to match operating conditions. The front wheel drive system operates through fifth gear; freewheels in sixth gear.

140G All Wheel Drive Motor Grader, includes the standard 140G arrangement plus All Wheel Drive modifications.

At 2200 RPM:

Normal Operation

1-2 Gears112 kW (150 HP)

3-6 Gears134 kW (180 HP)

Heavy Duty Operation (All Wheel Drive)

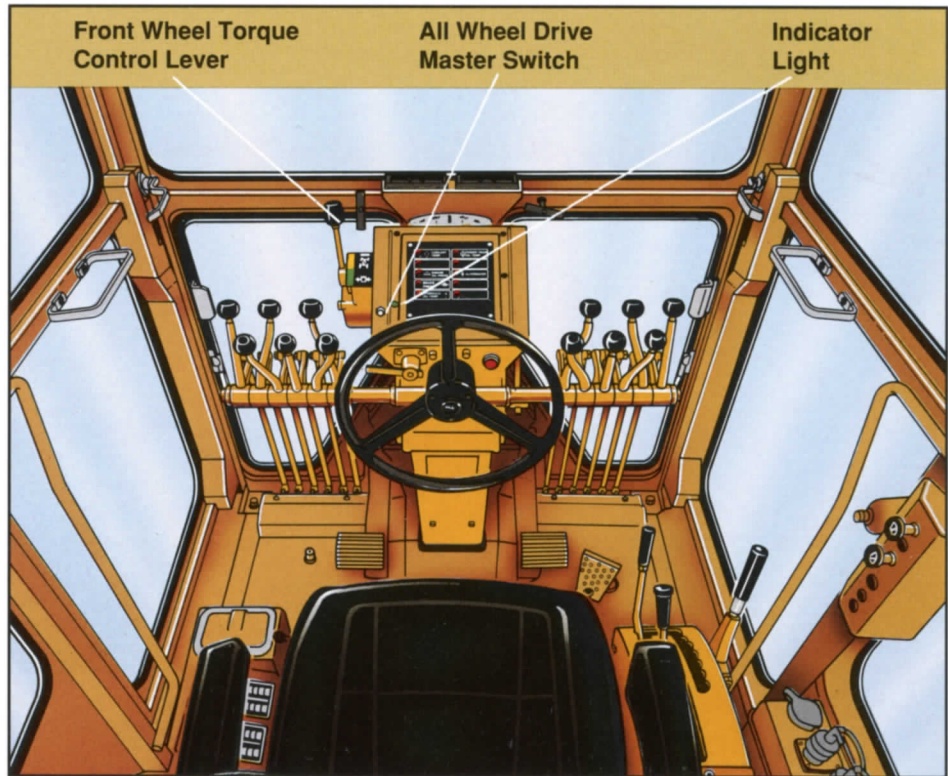
All Gears134 kW (180 HP)

Note: For standard specifications and features, refer to 140G specification sheet AEHQ3809. Machine shown may include optional equipment.



SPECIFICATIONS

- The front wheel drive system is activated by the on/off switch.
- A light on the console reminds the operator that the system is on.
- The manual control lever allows the operator to adjust the hydraulic pressure which controls wheel torque.



Engine



Flywheel Power @ 2200 RPM:

Normal Operation:

Gears 1-2112 kW (150 HP)

Gears 3-6134 kW (180 HP)

All Wheel Drive:

Gears 1-6134 kW (180 HP)

This engine conforms to the standards listed in the 140G specification sheet AEHQ3809.

Weight (approximate)



Operating weight includes lubricants, coolant, full fuel tank, operator, 4267 mm (14') blade with hydraulic sideshift and tip, differential with lock/unlock control, 14.00-24, 10 PR (G-2) traction-type tires, and low profile ROPS cab.

Weight on front wheels.....4959 kg (10,932 lb)

Weight on rear wheels.....9955 kg (21,948 lb)

Total Weight.....14 914 kg (32,880 lb)

Add weights of additional equipment from the optional equipment list on page 3.

Wheels



Front rim and wheel assemblies are non-interchangeable. Tubeless tires, six 14.00-24, 10 PR (G-2) traction-type. Multi-piece rims, 254 mm x 610 mm (10" x 24").

Optional wheels: 360 mm x 635 mm (14" x 25"), for 17.5 x 25 tires.

Hydraulic System



The front wheel drive system uses the same hydraulic tank as the implement system. A 100 cm³ (6.1 in³) variable displacement, axial piston pump drives a 1640/655 cm³ (100/40 in³) low speed, high torque motor in each wheel. Flow divider valves ensure both wheel motors turn at all times, maintaining tractive effort to both front wheels.

In gears one through three, the wheel motors operate at 100% displacement, providing high torque for big blade loads. In gears four and five, the wheel motors operate at 40% displacement providing a high speed range. In sixth gear the motors freewheel, then re-engage when the system is downshifted. Concise control of the front drive system, through the manual control lever, allows the operator to match front wheel torque to every specific job situation.

Gear	1	2	3	4	5	6
km/h.....	3.9	6.2	9.8	16.2	26.0	41.0
MPH.....	2.4	3.9	6.1	10.0	16.1	25.5

Wheel Motor Displacement

cm ³	1640	1640	1640	655	655	*
in ³	100	100	100	40	40	*

*Freewheel

Optional Equipment

(with approximate installed weights)

	kg	Lb		kg	Lb
Air Conditioner, complete. Includes heater and pressurizer, plus 75 amp alternator. (Condenser mounted on rear face of cab).....	133	294	Guard (transmission).....	168	371
Air Dryer	18	39	Heater, cab (includes pressurizer)	34	76
Alternator (75 amp)	5	11	Hydraulic Systems.....	*	*
Blades:			Lights:		
Hydraulic sidseshift;			Work lights (2 front, 2 center).....	6	13
With tip control			Cab directional and headlights.....	9	20
4.3 m (14')	362	799	Cab directional, headlights and bar-mounted flood.....	13	28
3.7 m (12')	288	635	Bar directional and headlights	9	20
Without tip control			Warning light (rotating beacon)	3	6
4.3 m (14')	265	585	Push Plate (front-mounted).....	461	1,017
3.7 m (12')	191	421	Scarifier:		
4.0 m (13') (requires 8W2402 or 8W2403)			V-type (11 teeth).....	845	1,862
4.0 m x 686 mm x 25 mm/ (13' x 27" x 1")	45	100	Straight-type (17 teeth).....	902	1,988
Blade Float (hydraulics).....	67	148	Seat (adjustable suspension type).....	14	30
Independent right-hand/left-hand	50	111	Starting Aids:		
Blade Lift Accumulator	71	156	Engine coolant heater.....	1	3
Cab, ROPS (full-height).....	54	120	Starting System (low-temperature).....	95	209
Circle Drive Slip Clutch	16	35	Steering System (supplemental) meets SAE J53.....	50	111
Cutting Edges:			Tachometer (engine speed).....	3	7
For 4.3 m (14') blade	73	161	Tires (optional):		
For 3.7 m (12') blade	67	148	14.00 x 24		
Defroster (fan):			12 PR (G-2).....	41	90
Front window	2	4	17.5 x 25		
Rear window	2	4	12 PR (L-2).....	406	894
Differential (tandem drive train with lock-unlock)	51	112	Tires (omission).....	-512	-1,128
End Bits, reversible overlay (set of 2)	11	24	Vandalism Protection	8	19
Engine Compartment Doors.....	110	242	Wheel Rims, 356 mm (14") (set of six) In place of standard 254 mm (10") rims	140	308
Fuel Tank			Wiper (rear window):		
378.6 liter (100 gal) capacity	91	200	Full-height cab.....	4	8
Gauge (fuel level):			Standard low-profile cab	4	8
Standard 283.9 liter (75 gal) tank	4	8			
Custom 378.6 liter (100 gal) tank.....	1	2			

*See hydraulic systems chart on next page.

Hydraulic Systems (Include valves and operating linkage.)

Side Shift	Tip	Front Scarifier	Plow/Dozer	Rear Ripper	Angle Dozer (High Flow)	Snow Wing (valves)		System Number	Weight*	
						Nrml. Flow	High Flow		kg	lb
■	■							8W2394	19	41
■	■			■				8W2411	40	88
■	■	■						8W2395	29	63
■	■		■			2		8W2389	51	112
■	■	■	■			2		8W2390	61	135
■	■	■		■				3Z4846	50	110
■	■			■		2		3Z4830	54	119
■	■		■					3Z4828	32	70
■	■		■			1	1	714737	51	112
■	■		■			3		3Z4833	60	133
■	■		■	■		2		3Z4829	67	148
■	■		■	■		1	1	714736	67	148
■	■		■	■				3Z4851	48	106
■	■	■	■					3Z4837	41	91
■	■	■	■	■				3Z4847	58	127
■	■	■				2	1	3Z4854	57	125
■		■						3Z4838	42	93
■		■	■					3Z4848	36	74
■	■		■	■	■			3Z4885	58	127
■	■	■	■			1	1	3Z4598	60	133
			■	■				3Z4906	29	65
■	■	■	■			3		3Z4947	70	154
■	■		■	■	■	1	1	3Z4872	78	173
■	■	■	■	■		3		3Z4966	78	173
■	■		■		■	3		3Z5020	41	91

*Change in operating weight.

NOTE: Machine can be equipped with one system only.

