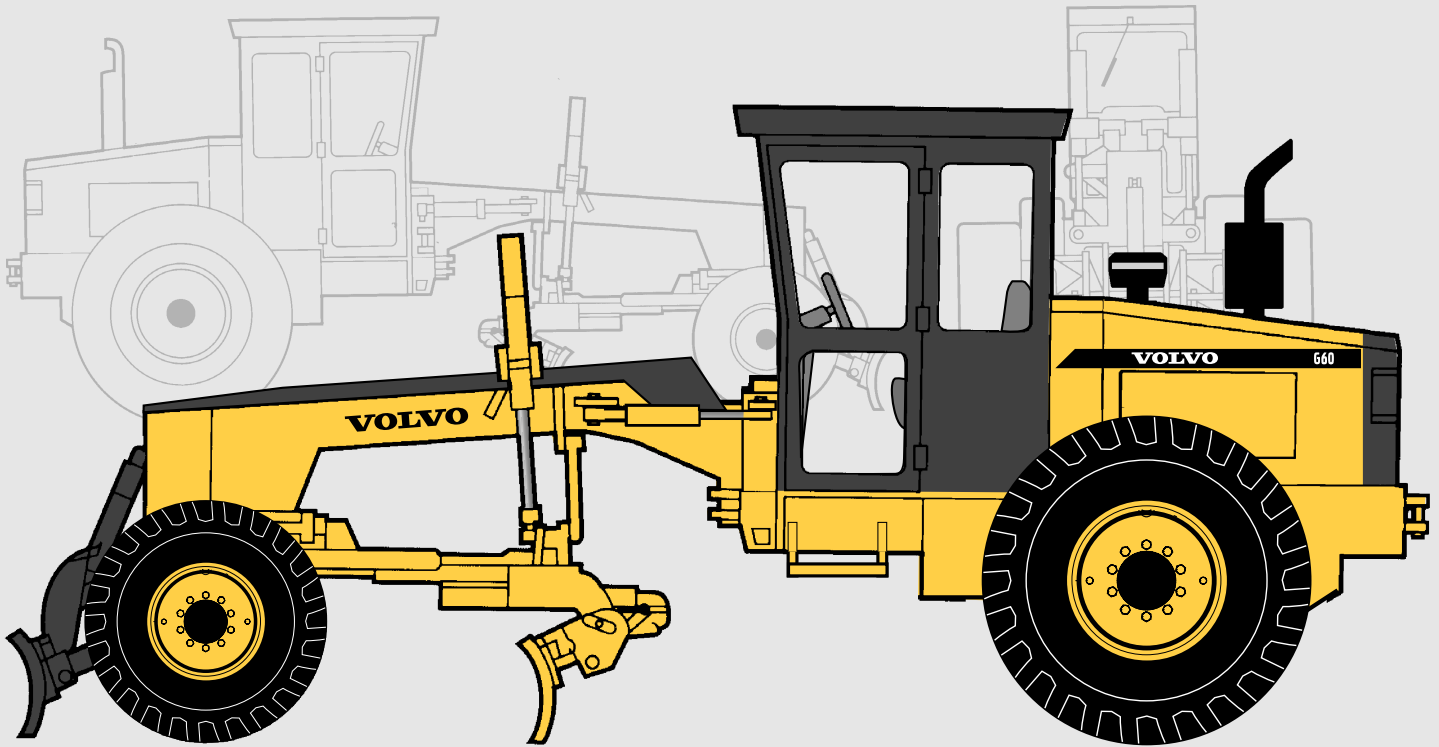


VOLVO MOTOR GRADER G60 / G66

COMPACT



KEY FEATURES:

- Infinitely variable ground speeds 0-20 mph (0-32 km/h)
- ROPS canopy or fully enclosed cab ROPS
- Tight turning radius 16'6" (5 029 mm)
- Full range of front and rear attachments
- Fully adjustable, low effort, operator friendly controls
- Single axle drive or All Wheel Drive
- Dual lever speed and directional controls
- Hydraulically Boosted Dual Braking System with reserve power assist
- Heavy duty positive traction differential
- 2 speed rear axle gearbox with neutral position
- 10' (3 048 mm) hydraulic sliding moldboard

MODEL	G60	G66
Configuration	Articulated Frame Single Axle Drive	Articulated Frame All Wheel Drive
Engine	Cummins 4B3.9	Cummins 4B3.9
Output (SAE J1349)	85 hp (63 kW)	85 hp (63 kW)
Operating weight	12,800 lb (5 810 kg)	13,400 lb (6 080 kg)
Turning Radius	16'6" (5 029 mm)	

VOLVO



OPERATING WEIGHTS

G60		
Total	12,800 lb	5 810 kg
Front wheels	3,870 lb	1 760 kg
Rear wheels	8,930 lb	4 050 kg

G66		
Total	13,400 lb	6 080 kg
Front wheels	4,200 lb	1 910 kg
Rear wheels	9,200 lb	4 170 kg

Weights shown include ROPS canopy with FOPS protection, all operating fluids and operator.



ENGINE DATA

G60 / G66 Standard

Make/Model	Cummins 4B3.9
Type	4 cycle, naturally aspirated, diesel
No. of cylinders	In line 4
Bore & stroke	4.02" x 4.72" (102 mm x 120 mm)
Displacement	239 cu in (3.92 L)
Horsepower @ 2500 RPM	85 hp (63 kW)

G60 / G66 Optional

Make/Model	Cummins 4BT3.9
Type	4 cycle, turbocharged, diesel
No. of cylinders	In line 4
Bore & stroke	4.02" x 4.72" (102 mm x 120 mm)
Displacement	239 cu in (3.92 L)
Horsepower @ 2500 RPM	110 hp (82 kW)

Engine equipped with a dual element, drytype air cleaner with evacuator. 12 volt starting and electrical system with 65 amp (780 watt) alternator.

Performance: Rated gross horsepower to SAE J1995 standard conditions with water pump, lubricating oil pump and fuel system.



TRANSMISSION

Type Hydrostatic
Control Hand lever
Transmission is "declutched" by brake pedal.
Mechanical neutral lockout with neutral start switch.

Operating pressure	3,000 PSI (20 700 kPa)
Maximum pressure	5,000 PSI (34 500 kPa)

Heavy duty hydrostatic drive gives complete control to the operator over operating ground speeds. This permits very smooth increases or decreases in operating speeds, essential when fine grading. Easy forward or reverse selection without the need for clutching makes repetitive operation, such as pad work, simpler. Infinitely variable motor control provides faster job site cycle times.

SPEEDS @ 2500 RPM

Forward and Reverse	
Working	0-10 mph (0-16 km/h)
Roading	0-20 mph (0-32 km/h)

Foot controlled forward and reverse pedal available as an option.



DIFFERENTIAL / FINAL DRIVE

Positive traction differential consists of 4 bevel gears and automatic lock-up. Heavy duty flanged sleeve construction is supported by tapered roller bearings, allowing fully floating, non-load carrying drive axles. A heavy duty two speed gearbox provides work and travel modes as well as a neutral position for towing.
Ground clearance 16" (406 mm)



WHEELS & TIRES

Front:

Tire size	15 x 19.5, TL, G-2
Ply rating (PR)	8
Rim size	12.25" (311 mm)

Rear:

Tire size	16.9 x 24, TL
Ply rating (PR)	6
Rim size	15" (381 mm)
Diamond Tread available as an option	



BRAKES

Service Brakes Foot operated
Fade resistant, hydraulically actuated drum brakes effective on rear wheels. System features dual braking circuits for even braking on both sides of the grader. Includes reserve power assist and operator warning system (visual and audible). Hydrostatic drive provides dynamic braking.

Parking Brakes Hand operated
Independent, mechanically actuated drum brakes effective on rear wheels. System uses a cable equalizer to assure even engagement pressure on both sides. Includes visual and audible warning system for parking brake on.

All braking systems meet SAE Standard J1473 OCT 90, SAE Recommended Practice J1152 APR 80 and ISO 3450:1985.



FRONT AXLE

Front axle type: fully welded steel truss, gusseted for torsional strength and rigidity. Single oscillation pin with replaceable pin supports.

Oscillation 35° up and down
Ground clearance 16" (406 mm)
Wheel lean (standard on G66, optional on G60) Hydraulic, 15° R or L



STEERING

Type Hydraulic power steering
Turning radius (outside front wheel)
- articulated frame - G66 16'6"
(5 029 mm)
(turning radius on G60 same when equipped with optional leaning wheel cylinder)
Operating pressure 1,000 PSI
(6 900 kPa)

Steering system operates from separate hydraulic pump.



FRAME

Rear 12" (305 mm)
heavy gauge box channel
Front welded box type
Size 0.5" x 8" x 8"
(13 mm x 203 mm x 203 mm)

Full front and rear frame sections



ARTICULATION

4" (102 mm) diameter pivot pins, turning on 4 tapered roller bearings. 2 hydraulic cylinders mounted with replaceable ball joints and dust shields.
Articulation angle 37°



CIRCLE ASSEMBLY

Size 39" (991 mm) outside diameter
Type full circle construction
Moldboard height controlled by two hydraulic cylinders connected to ball joints at turntable. Trunnion mounted to frame with bearings and replaceable bushings. Circle centered with 3 adjustable alignment blocks with removable shims. Replaceable wearplate between circle and drawbar.



CIRCLE DRIVE

Circle rotation 120°
Twin hydraulic cylinder circle drive system uses direct acting hydraulic power permitting moldboard repositioning under full load. Permits moldboard to be repositioned within grader's width for travel. Circle turn cushion valve available as an option.



DRAWBAR

Main drawbar (solid) 4" (102 mm) square
Cross bar (solid) 1" x 4"
(25 mm x 102 mm)
"T" bar designed for maximum visibility and support. Connected to frame by shim adjustable ball stud.



MOLDBOARD

Size 10' x 19" x 5/8"
(3 048 mm x 483 mm x 16 mm)
Replaceable cutting edges
& end bits - 2 5' x 6" x 0.5"
(1 524 mm x 152 mm x 13 mm)
Cut below ground 10" (254 mm)
Blade ground clearance 12" (305 mm)
Blade tilt positions 4
Hydraulic tilt available as an option.
Blade reach outside front tires:
- moldboard extended & using hydraulic blade slide
right or left 46" (1 168 mm)
- articulated & extended
right or left 75" (1 905 mm)
Optional circle sideshift cylinder available for increased blade mobility.



CAPACITIES

Fuel tank 39 gallon (148 L)
Hydraulic 30 gallon (114 L)
Coolant 4.5 gallon (17 L)
Final drive 4.5 gallon (17 L)



CAB & CONTROLS



All hydraulic controls are located on the fully adjustable steering pedestal. 8 low effort, direct acting hydraulic control levers are arranged in accordance with the industry standard for optimum operator convenience, visibility and comfort. Full hydraulic controls provide operation of circle turn, left and right blade lift and float control, articulation, moldboard slide, and optional leaning wheel and front blade/scarifier.

Pedestal instrument cluster: engine temperature gauge; engine oil pressure gauge; fuel level gauge; volt meter; tachometer.

A right hand console houses the transmission controller, throttle, hour meter, all electrical switches, heater controls and ignition switch.



HYDRAULICS

Standard "Single Flow" hydraulic system with feathering blade lift controls provides smooth response.

Hydraulic tank contains a temperature gauge and sight glass for fluid level checks.
Operating pressure 1,800 PSI
(12 411 kPa)
Single section gear pump 16 gpm
(61 lpm)

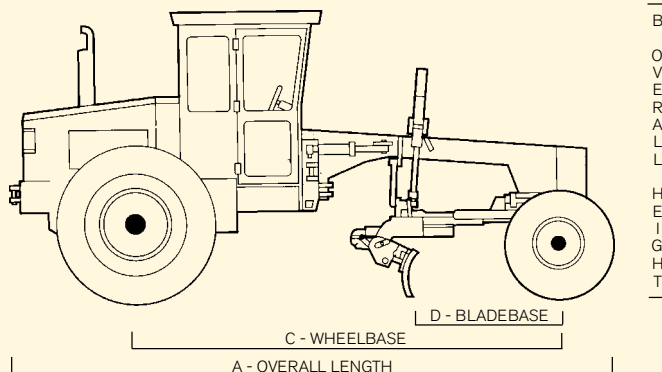
"Twin Flow" hydraulic system available as an option.



FILTERS

Transmission 10 micron
Hydraulic 33 micron spin-on type

DIMENSIONS



A Overall length 20'10" (6 350 mm)
B Overall height 9'6" (2 896 mm)
C Wheelbase 15'4" (4 674 mm)
D Bladebase 6'2" (1 880 mm)

Overall width
- front tires 7'2" (2 184 mm)
- rear tires 7'2" (2 184 mm)



G66 ALL WHEEL DRIVE

G66 AWD operates in low range, forward and reverse speeds from 0-10 mph (0-16 km/h).

Automatically disengages when the operator presses the brake pedal or shifts the transmission to neutral. All wheel drive provides optimum traction in all working conditions. System maintains equalized traction to both front wheels in turns and in all traction situations. Grader retains full front axle mobilities of oscillation and wheel lean.

ATTACHMENTS

- Automatic Blade Control
- Counter Weight
- Front Mounted 7' (2 134 mm) Blade/Scarifier
- Front Mounted 8' (2 438 mm) Blade/Scarifier
- Front Mounted "V" Scarifier
- Rear Mounted Rippifier
- Rotary Broom
- Side Dozer
- Utility Front End Loader
- Windrow Eliminator

STANDARD EQUIPMENT

- Cummins 4B3.9 85 hp (63 kW)
- Hydrostatic drive
- "Single Flow" hydraulic system
- Heavy duty positive traction differential
- 2 speed rear axle gearbox with neutral position
- ROPS canopy, with FOPS protection, c/w fully adjustable control pedestal, low effort, industry standard controls, feathering type blade lift controls
- 10' (3 048 mm) hydraulic sliding moldboard
- Hydraulically Boosted Dual Braking System with reserve power assist
- Power steering
- Hydraulic leaning front wheels (G66)
- Ratchet type park brake with operator warning alarm and indicator
- Gauges: engine temperature and oil pressure, volt meter, fuel level, tachometer, hour meter
- Moldboard float control valves
- Muffler
- 12 volt electrical system
- Backup alarm
- Seatbelt
- Steps and grab handles
- Lockable engine side panels
- Backup lights
- Front and rear directional, brake and tail lights and hazard lights
- 2 dual beam headlights
- Inside convex rear view mirror
- External lockable battery box



FRONT MOUNTED BLADE (optional)

- With scarifier teeth
- Size 7' x 17" x 5/8"
(2 134 mm x 422 mm x 16 mm)
- 8' x 17" x 5/8"
(2 438 mm x 422 mm x 16 mm)
- Blade ground clearance 16" (406 mm)
- Replaceable, standard grader cutting edge
- Number of teeth 4
- Mounted on front blade. Replaceable tips
- Cutting depth 6" (152 mm)
below blade
- Cutting width 43" (1 092 mm)

OPTIONAL EQUIPMENT

- "Twin Flow" hydraulic system
- All Wheel Drive (available as G66)
- Enclosed ROPS cab with FOPS protection
- Cummins 4BT3.9 110 hp (82 kW)
- Hydraulic blade tilt
- Electronic blade controls
- Forward-Neutral-Reverse foot control pedal
- Foot pedal accelerator
- 7' (2 134 mm) Front Mounted Blade with scarifiers
- 8' (2 438 mm) Front Mounted Blade with scarifiers
- Rear Tires:
 - Diamond Tread 16.9 x 24
 - Traction Lug 16.9 x 24 or 18.4 x 28
- Cab heater
- Windshield defroster
- Beacon light
- Working lights
- Windshield wipers
- Windshield washers
- Air cleaner service indicator
- Outside rear view mirrors
- Rear glass in canopy
- Hydraulic leaning wheels

Your safety and the safety of those around you depends on using care and judgement when operating and servicing your grader. Do not operate the grader until you read and understand the warnings and instructions in the operator's manual. www.volvo.com

Under our policy of continuous product development and improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

