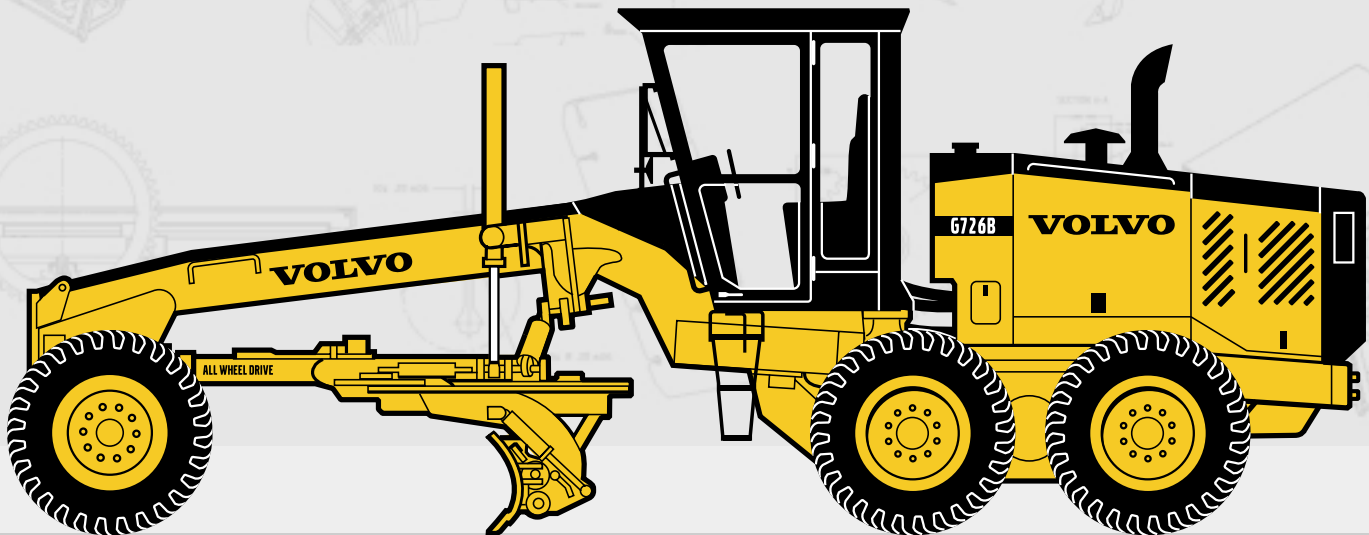


VOLVO MOTOR GRADER G726B

ALL WHEEL DRIVE



- **Configuration:** Articulated frame
- **Engine model:** Volvo D7DGDE2
- **Maximum net engine output @2200 RPM (per SAE J1349):** 198 - 235 hp (148 - 175 kW)
- **Base weight:** 35,400 lb (16 057 kg)
- **Blade down force:** 17,854 lb (8 099 kg)
- **Blade pull:**
All Wheel Drive – 28,019 lb (12 709 kg)
Tandem – 20,519 lb (9 307 kg)
- Single lever "Smart Shifter" transmission control with gear memory feature
- Separate hydraulic pump & speed sensor for each front wheel
- Variable aggression for job matching
- Maintains aggression at both front wheels through turns
- Creep feature allows hydrostatic drive at front wheels from 0-2.0 mph (0-3,2 km/h) for optimum fine grading
- Wheel motor efficiencies maintained in both forward and reverse
- AWD available at speeds up to 20.2 mph (32,5 km/h)
- 8400 fully sequential direct drive powershift transmission
- Choice of fully enclosed, ROPS cab in full height or low profile configuration, or ROPS canopy
- Moveable Blade Control System
- Load sensing, Closed Center Hydraulic System
- Fully adjustable control pedestal with low effort hydraulic controls
- Full front and rear frame sections designed for attachment mounting

VOLVO



Base operating weight (Standard equipment)

Weights shown include full cab with ROPS, all operating fluids and operator.

G726B

Total 35,400 lb (**16 057 kg**)
On front wheels 10,266 lb (**4 657 kg**)
On rear wheels 25,134 lb (**11 401 kg**)

Weight adjustments for various options are listed.

Typically equipped operating weight:

includes 14' x 25" x 7/8" (**4 267 x 635 x 22 mm**)
moldboard and scarifier.

G726B 37,420 lb (**16 973 kg**)



Productivity (Standard equipment)

Maximum blade pull (no wheel slip, 0.85 traction co-efficient) 28,019 lb (**12 709 kg**)

Blade down force

• cutting capability
(ISO 7134) 17,854 lb (**8 099 kg**)

Blade down force is the maximum downward force which may be applied at the cutting edge.



Engine data

Make/Model Volvo D7DGDE2
Type 4 Cycle, Turbocharged, Aftercooled
No. of cylinders In Line 6
Bore & stroke 4.25" x 5.11" (**108 x 130 mm**)
Displacement 436 cu in (**7,1 l**)

Maximum net engine output @ 2200 RPM
(per SAE J1349) 198-235 hp (**148-175 kW**)

Rated gross brake horsepower @ 2200 RPM

• Gears forward 1, 2 and
Reverse 1 205 hp (**153 kW**)

Rated gross brake horsepower @ 2200 RPM

• Gears forward 3-8 and
Reverse 2-4 241 hp (**180 kW**)

Rated net brake horsepower @ 2200 RPM

• Gears forward 1, 2 and
Reverse 1 198 hp (**148 kW**)

Torque @ 1100 RPM 664 lb.ft (**900 N.m**)
Torque rise 35%

Rated net brake horsepower @ 2200 RPM

• Gears forward 3-8 and
Reverse 2-4 235 hp (**175 kW**)

Torque @ 1400 RPM 774 lb.ft (**1 050 N.m**)
Torque rise 34%

All Wheel Drive engaged

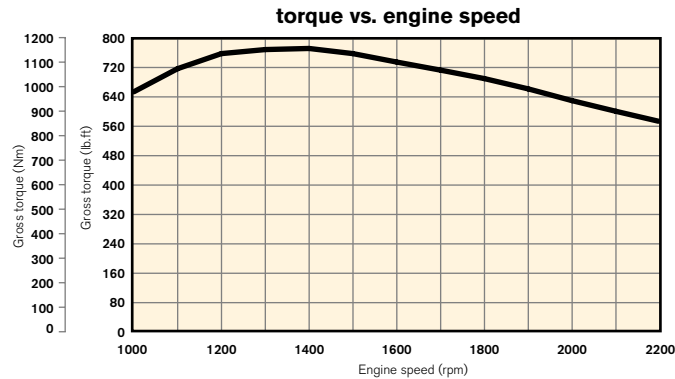
Rated gross brake horsepower @ 2200 RPM

• All gears 241 hp (**180 kW**)
Rated net brake horsepower @ 2200 RPM

• All gears 235 hp (**175 kW**)
Torque @ 1400 RPM 774 lb.ft (**1 050 N.m**)
Torque rise 34%

Performance: Rated net brake horsepower SAE standard J1349/ISO 3046-2 conditions with water pump, fuel system, air cleaner, muffler, alternator, cooling fan and lubricating oil pump.

Engine performance curve



Engine data (continued)

Engine equipped with a two stage, dual element, dry type air cleaner with exhaust aspirator and service indicator. 24 volt starting and electrical system with 75 amp (**1800 watt**) brushless alternator with internal voltage regulator. Two heavy duty 12 volt maintenance free batteries with 660 cold cranking amps (CCA) and 160 minutes reserve capacity per battery. 950 CCA batteries available optionally. System includes battery disconnect.



Transmission

Make/Model Volvo 8400

Fully sequential, direct drive, powershift transmission. Engine cannot be started if transmission is in gear. Single lever "Smart Shifter" electronic transmission controller provides self-diagnostics. The flywheel mounted, multi-disc master clutch is oil cooled and lubricated for long life.

Ground speeds at 2200 RPM with standard tires:

Forward		Reverse	
Gears.....mphkm/h	Gears.....mphkm/h
1.....	2.8.....4,4	1.....	2.8.....4,4
2.....	3.9.....6,2	2.....	5.3.....8,5
3.....	5.3.....8,5	3.....	10.5.....16,9
4.....	7.5.....11,9	4.....	20.4.....32,7
5.....	10.5.....16,9		
6.....	14.7.....23,6		
7.....	20.4.....32,7		
8.....	28.5.....45,7		

Transmission guard is standard equipment and is hinged for easy access.



Differential / Final drive

Make/Model Volvo SR30

Single reduction final drive with an operator controlled lock/unlock differential. Rear axles are induction hardened, supported on double row spherical roller bearings.



Tandems

Oscillating tandem case has internal gusseting for maximum torsional strength. Field-proven split ring/flanged sleeve tandem mounting and 1" (**25 mm**) thick inner wall resists flexing from side loading during severe applications.

Depth 24.50" (**622 mm**)

Width 8.25" (**210 mm**)

Thickness • inner wall 1.00" (**25 mm**)

• outer wall 0.75" (**19 mm**)

Center distance 61.50" (**1 562 mm**)

Drive chain pitch 2.00" (**51 mm**)

Oscillation ±15°



Brakes

Service Brakes: Foot operated

Fade resistant, hydraulically actuated, oil disc service brakes located at the 4 tandem drive wheels are self-adjusting, fully sealed and maintenance free. System features crossover dual braking circuits for uniform braking on both sides of the grader. Includes reserve power assist and operator warning system (visual and audible).

Parking Brake

Spring applied hydraulic release independent, disc type parking brake on transmission output shaft and effective on all 4 tandem drive wheels. Includes visual and audible operator warning system for parking brake on, transmission in gear condition. Transmission will not engage with park brake on.

Braking systems to SAE Recommended Practice J1473 OCT. 90, and J1152 APR. 80; ISO 3450-1993-01-28. Volvo uses asbestos free brake components.



Wheels & tires (Standard equipment)

Tire size 14:00 x 24, G-2

Ply rating (PR) 12

Rim size 10.0" (**254 mm**)

Bolt-on rims are not interchangeable between the front wheels and the tandem wheels.



 **Front axle**

Type: Fully welded steel truss, gusseted for torsional strength, oscillates on a single 3.5" (89 mm) diameter center pivot pin.

Wheel lean 15° R & L
 Oscillation 16° up and down
 Ground clearance 24.0" (610 mm)
 Two 3" (76 mm) diameter wheel lean cylinders and lock valve are standard equipment.

 **All Wheel Drive**

The Volvo high torque All Wheel Drive System incorporates two variable displacement, closed loop piston pumps. The Volvo AWD design automatically adjusts hydraulic flow and pressure to the drive system to match tandem wheel speeds in all tractive conditions. Each front wheel is independently powered by a 2 speed motor. Each motor is controlled by its own speed sensor and pump. The All Wheel Drive system is controlled by the operator through a positive On/Off switch as well as a 16 position variable aggression dial. The front wheel speed sensors will always match front wheel speed to tandem wheels speed relative to the level of aggression selected by the operator. This provides optimum job matching

 **All Wheel Drive (continued)**

in all tractive conditions. When AWD is selected, the engine will deliver maximum VHP horsepower regardless of the working gear being used.

Typical operating pressure 3,000 psi (206 Bar)
 Maximum operating pressure 5,000 psi (344 Bar)
 Minimum operating pressure 500 psi (34 Bar)
 Top speed 20.2 mph (32.5 km/h)
 Creep Mode speed 0-2 mph (0-3.2 km/h)
 Maximum rim pull 7,500 lb (3 402 kg)

The Volvo high torque All Wheel Drive System operates in forward gears 1-7 and reverse gears 1-4. The operator may shift from 7th AWD into 8th and back to 7th AWD at any time for maximum high speed performance.

In addition, the Volvo system provides the operator with the ability to fine grade in Creep Mode using only hydrostatic front wheel drive.

The Volvo high torque All Wheel Drive System offers infinite speed control below 2 mph (3,2 km/h) for fine grading as well as a top speed of 20.2 mph (32,5 km/h) for snow plowing.

The AWD controller is integral with the electronic 8400 transmission controller, thereby supplying the same diagnostic features found in the Volvo 8400 transmission.

 **All Wheel Drive (continued)**

Volvo AWD motors maintain maximum efficiency in both forward and reverse.

Operating modes

All Wheel Drive or Tandem Drive

- On-Off Selection
- Creep Mode - Hydrostatic front wheel drive only for optimum control and maneuverability while fine grading.
- Manual Mode - Allows the operator to match front wheel aggression setting to specific applications.

AWD features

- Maximum startup torque
- Power maintained in either direction
- Smooth operation in low speeds
- Maintains front wheel aggression in turns
- One speed sensor at each front wheel
- Hydrostatic Creep Mode feature



Steering

Hydrostatic power front wheel steering incorporating two steering cylinders. Meets SAE J1511 OCT. 90 with optional secondary steering.

Minimum turning radius using front axle steering, articulation, wheel lean and unlocked differential 25'6" (**7 772 mm**)

Steering arc 72°

Frame articulation angle 22°

Articulation lock standard.



Frame

Full front and rear frame sections.

Front: Fully welded box section. Dual sloped front frame provides excellent forward visibility.

Minimum dimensions of

box section 10.5" x 14.0" (**267 x 356 mm**)

Plate thickness 0.75" (**19 mm**)

Vertical section modulus

at arch 119 cu in (**1 950 cm³**)

minimum 101.5 cu in (**1 663 cm³**)

maximum 212 cu in (**3 474 cm³**)

Linear weight - minimum-maximum

107.1 - 232.5 lb/ft (**159.4 - 346.0 kg/m**)

Rear: Full perimeter rear frame permits modular powertrain mounting for ease of service and is ideal for attachment mounting. Optional first user lifetime warranty on frame and articulation joint.

Minimum dimensions of

rear frame 4.0" x 10.0" (**102 x 254 mm**)

Plate thickness 0.5" (**13 mm**)



Articulation

Twin 4.5" (**114 mm**) hydraulic cylinders articulate frame 22° right and left. Anti-drift lock valve ensures stable operation.



Circle

Hardened teeth, cut on the outside of the circle for maximum leverage and minimum wear.

The circle is supported at six points by three adjustable clamp plates and three adjustable guide shoes, providing optimum circle support and load distribution. DURAMIDE™ faced clamp and guide shoes prevent metal-to-metal contact and provide maximum service life.

DURAMIDE™ is a synthetic bearing material that maximizes service life and reduces circle system maintenance requirements.

Diameter 66.25" (**1 683 mm**)

Thickness 1.25" (**32 mm**)

Adjustable guide shoes 3

Adjustable clamp plates 3



Circle drive

The Volvo dual cylinder Circle Drive System uses direct acting hydraulic power for exceptional turning and holding capability under full load. Circle Drive System uses hardened drive pinions and is protected against impact damage by an overload cushion valve as standard equipment.

Hydraulic drive cylinders 2

Points of leverage 2

Rotation 360°



Drawbar

Fully welded box section. Narrow "T" design permits optimum visibility to the work area. Drawbar ball stud provides an adjustment to compensate for different tire sizes. Blade lift cylinder anchors are straddle mounted on drawbar to provide maximum strength and support.

Dimensions of

box section 6.5" x 6.5" (**165 x 165 mm**)

Plate thickness 1.0" & 0.75" (**25 & 19 mm**)



Moldboard

Standard moldboard with

replaceable end bits 12' x 25" x 7/8"

(**3 658 x 635 x 22 mm**)

Blade material SAE 1050 high carbon steel

Edge: through hardened 6" x 5/8" boron steel

(**152 x 16 mm**)

Bolt spacing 6" (**152 mm**)

• bolt size 5/8" (**16 mm**)

Slide rails supported by DURAMIDE™ bearings.



Blade range: Moveable Blade Control System

(Dimensions shown with standard moldboard)

LEFT

RIGHT

Reach outside tires - articulated

frame 120.0" (**3 048 mm**) 119.5" (**3 035 mm**)

Reach outside tires - straight

frame 79.5" (**2 019 mm**) 79" (**2 007 mm**)

Blade slide 26.5" (**673 mm**) 26.5" (**673 mm**)

Circle side

shift 30.5" (**775 mm**) 29.5" (**749 mm**)

Maximum bank

sloping angle 90° 90°

Blade ground clearance 17.5" (**445 mm**)

Blade cutting depth 32.0" (**813 mm**)

Blade tilt range 44° forward 6.5° back

Superior blade mobility permits steep ditch cutting angles and back sloping without putting the front tire on the slope.



Cab & controls



All controls are located in a 90° arc forward and to the right of the operator. Located forward of the operator are the engine oil pressure, coolant temperature and fuel level gauges, transmission gear indicator and a multi-function Contronic monitoring display. Located in the fully adjustable steering pedestal are the following switches: differential lock/unlock, hazard lights, combination turn signal, horn and high beam headlight. Heater and wiper/washer controls, lighting and accessory switches are grouped in the operator's right hand console. This console also contains the ignition key and access to the circuit breaker and fuse panel. Located to the right of the operator, above the console, are the AWD On/Off switch, a 16 position variable aggression dial and the hydrostatic Creep On/Off switch. An accelerator/decelerator foot pedal and slider type hand throttle are standard equipment. Outside mounted rear view mirrors (L&R) are standard. Interior operator noise level ranges from 78 to 81 dB(A) per ISO 6394 (enclosed cab).

Cab options

- High capacity heater/air conditioner c/w adjustable vents, temperature control and 3 speed fan
- Fully adjustable, suspension seat
- Lower opening front windows
- Rear windshield wipers and washers
- Lower front window wipers and washers
- Modular, 24 volt radio and cassette player with remote control
- Operator Convenience Package (lunch box, steel vacuum bottle and holder, ashtray)
- 24 volt to 12 volt convertor for electrical accessories or two way radio installations

Full height cab with ROPS

Inside dimensions

Height 74.0" (**1 880 mm**)

Width @ controls 56.0" (**1 422 mm**)

Depth @ controls 55.5" (**1 410 mm**)

An optional Low Profile Cab is available with an inside height of 62" (**1 575 mm**). All Volvo Grader cabs and canopies are designed to meet or exceed SAE J1040 APR. 88, ISO 3471/1-1986(E), and 86/295/EEC ROPS requirements. The seatbelt is 2" (**51 mm**) wide and meets SAE J386 JUNE 93; ISO 6683-1981(E).



Load sensing hydraulics

Closed Center Hydraulic System senses load requirements and maintains system pressure 350 psi (**24 Bar**) above the load pressure.

System features industry standard control arrangement complete with low effort, feathering type, short throw levers located on a fully adjustable control pedestal.

System incorporates lock valves to prevent cylinder drift under load in the following circuits: blade lift, moldboard tilt, circle shift, wheel lean and articulation.

Hydraulic system features include axial piston pump, pressure and flow compensated, variable displacement with high output for smooth multi-functioning.

Maximum pressure 2,700 psi (**186 Bar**)

Output 2200 RPM. 0-75 U.S. gpm (**0-284 lpm**)

Filtration 10 micron spin-on type



Capacities

U.S.Gal. Imp.Gal. Litres

Fuel tank	100.0	83.3	378.5
Transmission	10.0	8.4	38.0
Final drive	6.0	5.0	23.0
Tandems (each)	26.4	22.0	100.0
Hydraulic oil tank	35.4	29.5	134.0
Coolant antifreeze protection to -58° F (-50° C) approx.	12.4	10.3	47.0
Engine oil	5.0	4.2	19.0



Attachments

"A" Frame 700 lb (**318 kg**)

Snow

Hydraulic Wing

• high-bench 4,800 lb (**2 177 kg**)

• low bench 4,000 lb (**1 814 kg**)

One Way Plow 2,350 lb (**1 067 kg**)

"V" Snow Plow

• 9' (**2 743 mm**) 2,500 lb (**1 134 kg**)

• 10' (**3 042 mm**) 2,650 lb (**1 202 kg**)

Earth

Dozer Blade

• 8' (**2 438 mm**) 2,620 lb (**1 188 kg**)

• 9' (**2 743 mm**) 2,870 lb (**1 302 kg**)

• 10' (**3 048 mm**) 3,120 lb (**1 415 kg**)

Front Mounted Scarifier 1,780 lb (**807 kg**)

Mid-mount Scarifier 1,725 lb (**782 kg**)

Push Block 1,050 lb (**476 kg**)

Ripper/Scarifier, rear 2,880 lb (**1 306 kg**)

Windrow Eliminator 1,300 lb (**590 kg**)

Dimensions

A Overall length 29'11" (**9 119 mm**)

D Wheelbase 20'0" (**6 096 mm**)

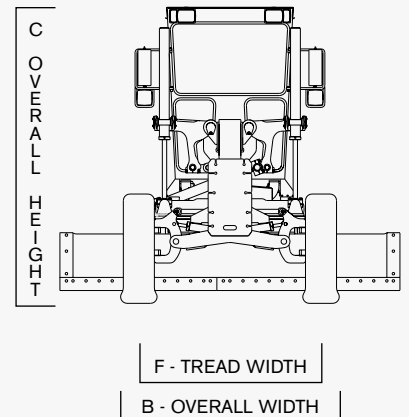
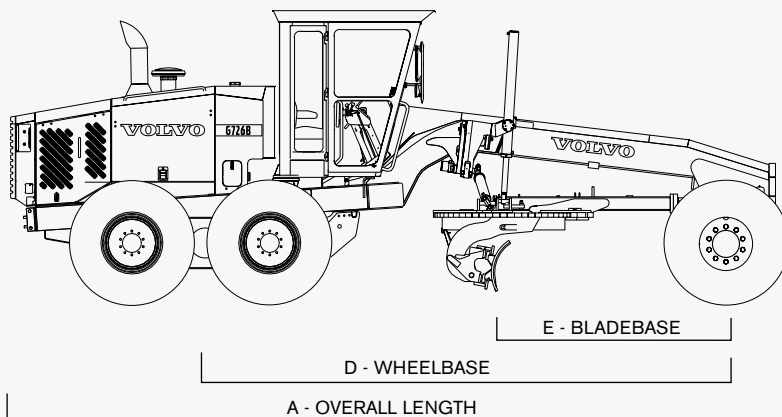
E Bladebase
• ISO 7134 8'6" (**2 591 mm**)

B Overall width 8'4" (**2 540 mm**)

C Overall height 11'2" (**3 404 mm**)

• with Low
Profile Cab 10'2" (**3 099 mm**)

F Tread width 6'10" (**2 083 mm**)



STANDARD FEATURES

<p>Volvo "High Torque" All Wheel Drive with hydrostatic Creep feature</p> <p>Operator controlled, lock/unlock differential final drive</p> <p>4 wheel, crossover, dual braking system with reserve power assist</p> <p>Park brake with operator warning alarm and indicator</p> <p>Fully sequential, direct drive, powershift 8400 transmission, with transmission guard</p> <p>13.5" (343 mm) diameter, 4 plate, full oil master clutch</p> <p>Moveable Blade Control System for optimum blade mobility</p> <p>Full front and rear frame sections designed to withstand shock loading of rear attachments</p> <p>Circle drive counter-balance valve protects circle drive against impact damage</p>	<p>Hardened circle teeth cut on outside of circle for maximum turning power</p> <p>Hardened circle drive pinions for maximum wear resistance</p> <p>Isolation mounted cab, transmission and engine for reduced noise and vibration</p> <p>Adjustable steering control pedestal with tilt head for maximum operator comfort</p> <p>Gauges include: coolant temperature, engine oil pressure, fuel, hourmeter, dash mounted air cleaner service indicator, articulation angle indicator, multi-function Contronic Monitoring System with visual and audible warnings</p> <p>Load sensing, Closed Center Hydraulic System with short throw, low effort control levers. Hydraulically operated blade lift, circle turn, moldboard slide and tilt, circle shift and wheel lean functions.</p> <p>Feathering type controls for precise blade adjustments</p>	<p>Suspension seat</p> <p>100 U.S. gallon (378.5 l) fuel tank capacity</p> <p>Dual leaning wheel cylinders</p> <p>DURAMIDE™ wear strips on circle clamp plates and guide shoes prevent metal-to-metal contact for maximum service life</p> <p>Hinged radiator guard for easy trash clean out</p> <p>Backup lights</p> <p>Backup alarm with automatic volume levels</p> <p>Painted high gloss Volvo yellow and gray</p> <p>Lockable tool box with storage space for scarifier shanks</p> <p>Engine side panels complete with locks</p> <p>Left and right outside rear view mirrors</p> <p>Interior rear view mirror</p> <p>Exhaust aspirated air cleaner</p> <p>Front cab wiper and washer</p>
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OPTIONAL EQUIPMENT

	lb	kg		lb	kg		lb	kg
Accumulators - blade lift (2)	122	55	• Front mounted plow lights - 2			Reflectors - rear/side	-	-
Air conditioner - 29,000 BTU			• high mount	120	54	Remote lube manifold for articulation cylinders	0	0
• HFC-134a (non-CFC refrigerant)	130	59	• low mount	100	45	Remote valve for attachments		
Brush guards	40	18	• Headlights with dimmer switch	0	0	• 3 or 5 bank - remote mount	85	39
Cab			• Moldboards lights - 2	2	1	Sideshift accumulator	50	23
• canopy shell with ROPS - deduct . . . (625)	(284)		• Rear flood lights - 2	2	1	Rim locks included with 3 piece rims	0	0
• FOPS protection for ROPS cabs	220	100	• Snow wing lights - 2	2	1	Secondary steering (power assisted)	95	43
• Low Profile Cab			Fenders			Tie down brackets	100	45
with ROPS - deduct (270)	(122)		• Front	80	36	Tires		
Cab heater - 49,000 BTU • with cab			• Rear	400	182	• 17.5 x 25, 12 PR, G-2,		
pressurizer and replaceable filter	60	27	Moldboards			14" (356 mm) rims	375	170
Defroster fans	3	1	• 14' x 25" x 7/8"			Tool kit	-	-
Engine block heater	3	1	(4 267 x 635 x 22 mm)	240	109	Transmission sump heater	-	-
Engine precleaner - Turbo II	6	3	Moldboard extensions			Tropical protection	-	-
First user lifetime frame warranty	0	0	R or L - 2' (610 mm)	190	86	Vandalism protection	8	4
Float control - right and left detent style			Moldboard edges - carbide 3/4" x 5"			Wheel weights for rear		
independent, electric	15	7	(19 x 127 mm)	-	-	wheels only - each	250	113
Hydraulic manifold cover	10	4	100 amp alternator	0	0	Window - opening - lower front	-	-
Hydraulic tank heater	3	1	Operator convenience package			Window - opening sliders - left/right	-	-
24 volt radio/cassette player	6	3	• lunch box, steel vacuum bottle			Wiper and washer - rear	-	-
Lights			and holder, ashtray	10	5	Wiper and washer - lower front	-	-
• Beacon (amber or blue)	10	4	Paint - custom colors	-	-			
• Clearance lights front & rear	2	1	Polar protection	0	0			

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. Volvo Motor Graders Limited is an ISO 9001 and 14001 registered company. 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.

Consult your Volvo dealer for recommended option and attachment selection.

VOLVO

Construction Equipment

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