

# AP-800C

Rubber Tire  
Asphalt Paver

**CAT**<sup>®</sup>



## Cat<sup>®</sup> AP-800C

### Operating weight:

with Extend-A-Mat 8-16B Screed	15 195 kg	33,500 lb
with Pavemaster 8B Screed	13 575 kg	29,930 lb

Hopper Capacity	5,5 cu m	215 cu ft
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Standard Paving Width	2438 mm	8'
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### Maximum Paving Range:

with Extend-A-Mat B Screed	6,1 m	20' 2"
with Pavemaster B Screed	6 m	20'

# Caterpillar® 3054DIT Diesel Engine

*Reliable and durable diesel engine for years of low maintenance operation.*

**Turbocharged for top performance and efficiency** especially at high altitudes with no derating required up to 2134 meters (7,000 feet).

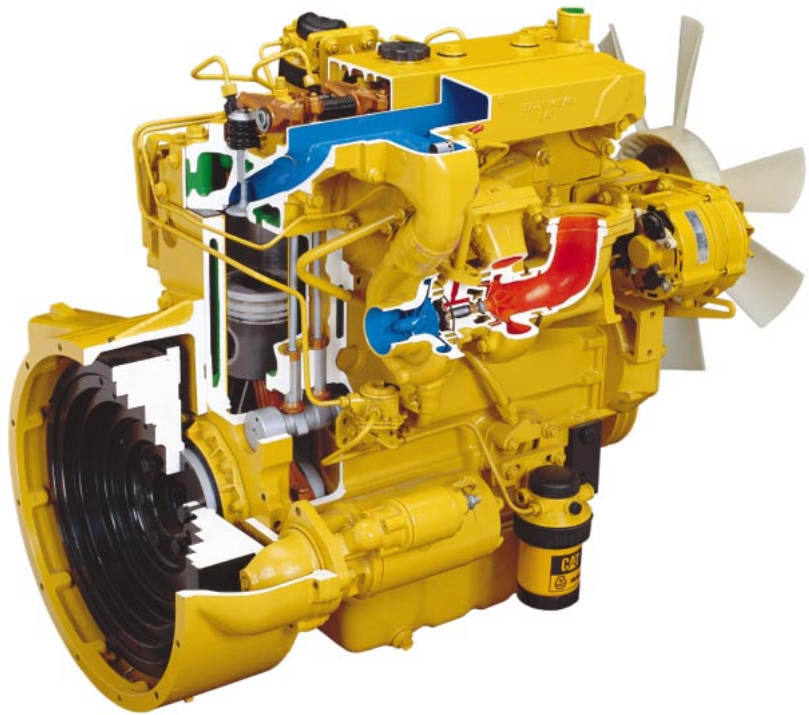
**Transverse-mounted engine** provides better cooling performance and greater accessibility for service.

**Meets EPA/CARB emissions engine regulations.**

**Low sound emission** complies with major regulatory rules.

**Adjustment-free direct injection fuel system** keeps fuel consumption low.

**Intake manifold heater** preheats incoming air for quick cold-weather starting.



## Hydrostatic Drive System

*Efficient hydraulic drive system eliminates chains and other mechanical linkages between diesel engine and final drive components.*

**Fully hydrostatic transmission** provides efficient, low-maintenance operation.

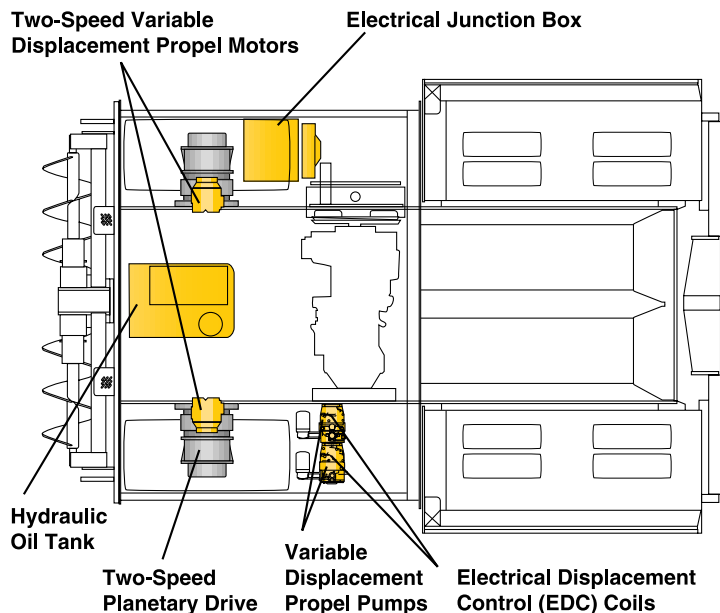
**Anti-slip/balance propel system** assures either wheel will continue to drive even if the other wheel is slipping.

**Separate propel circuit** for each drive wheel provides positive traction.

**Infinite speed selection** within four speed ranges, two in pave mode and two in travel mode.

**Decel pedal** provides foot control of propel speed freeing operator to control other paving functions.

**Optional front wheel assist** enhances rimpull on soft bases.



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## Operator's Station

*Single operator's station designed for comfort and optimum efficiency.*

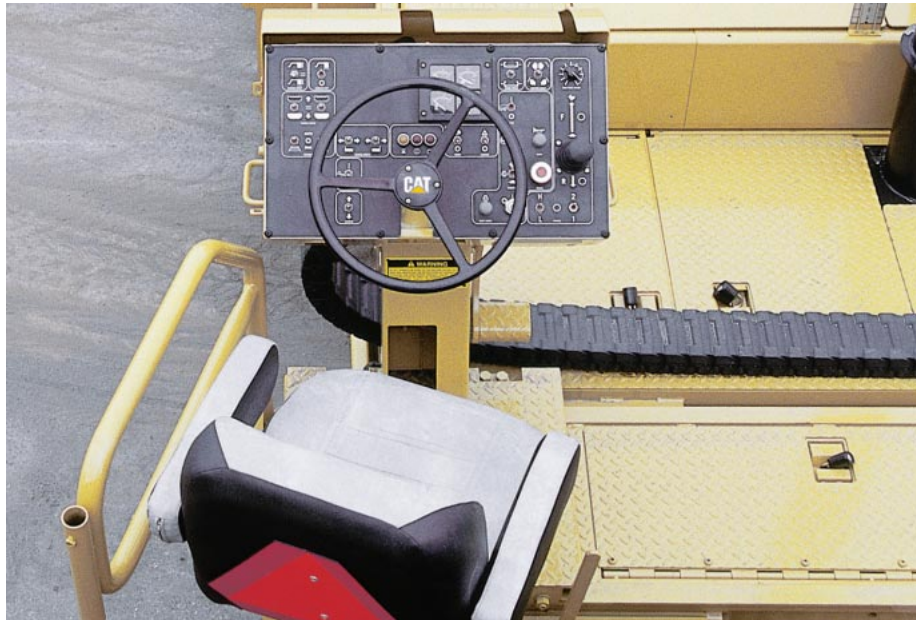
**Single operator's station** includes fully equipped instrument console and steering wheel with lockable cover.

**Operator's platform** can be positioned 305 mm (12") beyond each side of paver for greater operator visibility.

**Operator's seat** also pivots 152 mm (6") to left or right to further improve operator visibility.

**Low-mounted engine** provides unobstructed forward visibility.

**Electrical wiring** protected by an articulated vinyl enclosure.



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## Control Console

*Full instrumentation package keeps operator informed of status of all major systems.*

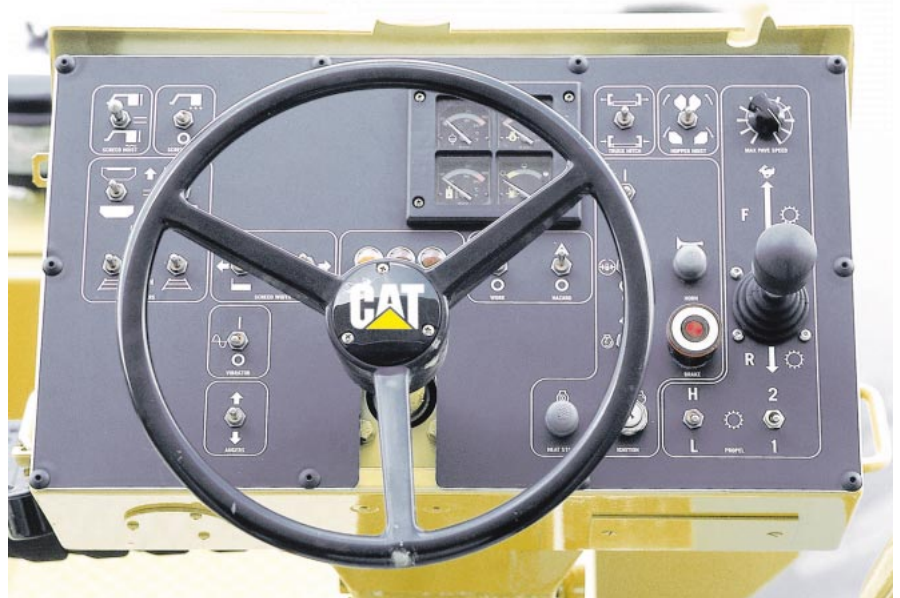
**International symbols and functional word descriptions** are shown for all controls.

**Gauges are analog-type** for quick interpretation.

**Warning signal lights and horn** alert operator to:

- High hydraulic oil temperature;
- Low hydraulic oil level;
- Low engine oil pressure; or
- High engine coolant temperature.

**Speed control** allows the operator to dial a maximum paving speed. Once set, the paver will return to the pre-set speed when control lever is in full forward position.



## Material Handling System

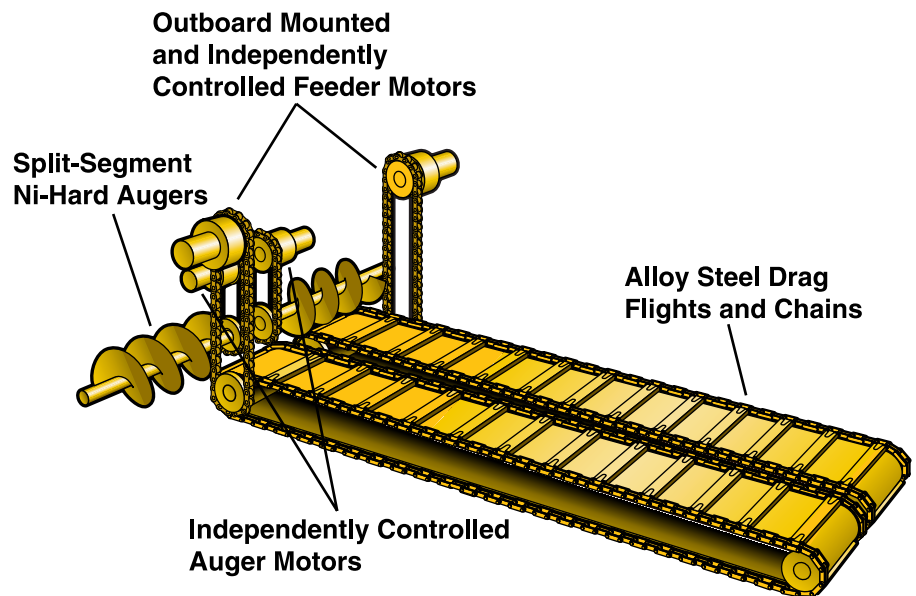
*Precise mix delivery through the most advanced material handling system.*

**Automatic fully-proportional feeder/auger system** provides superior material control.

**Left and right feeder/auger** units are controlled independently of each other.

**Wear items are alloy steel** for long wear life.

**Cast Ni-hard auger flights** are 406 mm (16") in diameter and provide long service life.



## Outboard Feeder Drives

*Increased live tunnel area provides easy servicing.*

**Feeders have outboard mounted** motors, reducers and feeder drive chains to maximize the live feeder tunnel area.

**Simplified service access** through a hinged door on the operator's station.



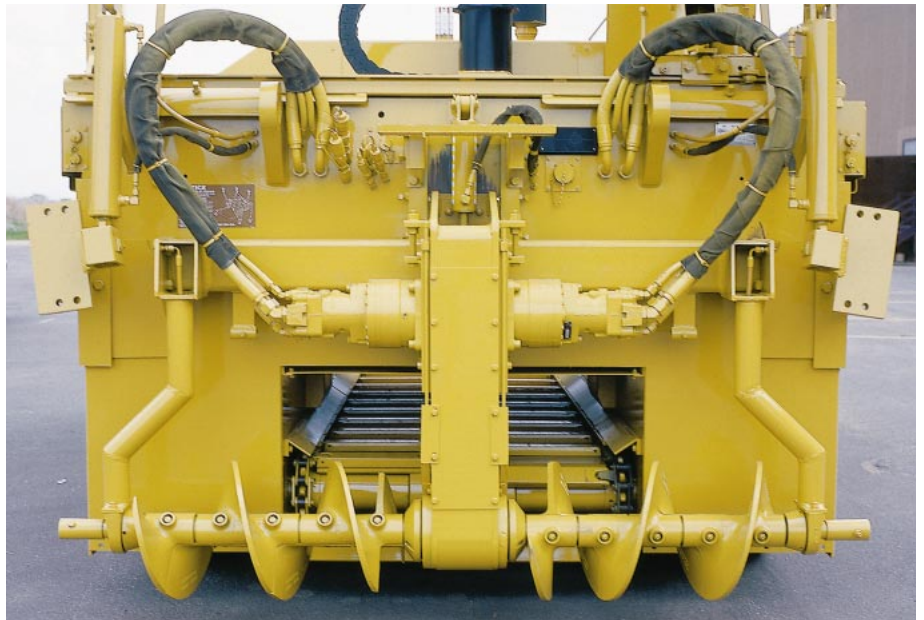
## Adjustable Height Auger Assembly

*Promotes mat consistency and minimizes segregation.*

**Auger assembly can be hydraulically adjusted 171 mm (6.75").**

**When working with larger stone mixes,** segregation can often be eliminated or minimized by raising the augers to allow mix to flow unrestricted under the auger assembly.

**Ability to raise the auger assembly** simplifies loading and unloading from a transport vehicle.



## Serviceability

*Simplified service means more paving and less maintenance time.*

**Large swing-open doors and panels** provide access to all service areas.

**Transverse engine mounting** provides ground-level access to hydraulic pumps and engine cooling system.

**Low-mounted engine** provides easy, ground-level access for servicing.

**Easy-identification wire coding system** simplifies troubleshooting electrical systems.

**Lubrication fittings** are clustered for quick service.



## Extend-A-Mat B Screed — Models 8-16B and 10-20B

*Variable width, power extending screed increases productivity and lowers operating costs.*

**Model 8-16B** paves from 2,44 m to 4,75 m (8' to 15' 6"). With cutoff shoes and extensions, range is 1,8 m to 6,1 m (6' to 20' 2").

**Model 10-20B** paves from 3,05 m to 5,94 m (10' to 19' 6"). With cutoff shoes and extensions, range is 2,44 m to 7,37 m (8' to 24' 2").

**Mat thickness and crown** are accurately controlled at any paving width.

**Extender sloping** from 14 percent below and to 2 percent above horizontal and can be adjusted on the go.

**Four fuel oil burners** with electric ignition provide even screed plate heating.

**Triangular configuration** of extender tubes and frame member improves torsional resistance.



## Pavemaster B Screed — Models 8B and 10B

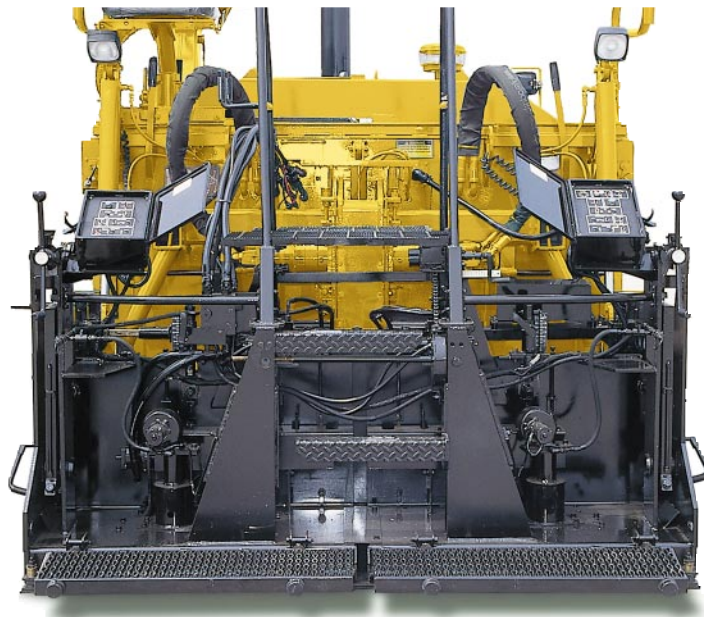
*Heavy-duty conventional fixed-width screed provides simple economical operation.*

**Model 8B** has a fixed paving width of 2,44 m (8'). With cutoff shoes and extensions its paving range is from 1,8 m to 6,1 m (6' to 20').

**Model 10B** has a fixed paving width of 3,05 m (10'). With cutoff shoes and extensions, paving range is from 2,44 m to 9,14 m (8' to 30').

**Two fuel oil burners** with electric ignition provide even screed plate heating. Insulated combustion chambers provide even heat distribution.

**Hydraulic strike-offs** extend to 762 mm (2' 6") on both sides of screed and have 152 mm (6") screed plates. Strike-offs have on-the-go height and slope adjustment as standard features. They can be sloped down 8 degrees or 14 percent (no up slope).



## Customer Support

*Cat dealer services help you operate longer with lower costs.*



Your Cat Dealer offers a wide range of services that can be set up under a customer support agreement when purchasing equipment. The dealer will help customers choose a plan that can cover everything from machine and attachment selection to replacement, to help get the best return on the machine investment.

**Selection.** Make detailed comparisons of the machines under consideration before buying. How long do components last? What is the cost of preventive maintenance? What is the true cost of lost production? Cat Dealers can give precise answers to these questions.

**Operation.** Improving operating techniques can boost one's profits. Cat Dealers have training videotapes, literature and other ideas to help increase productivity.

**Purchase.** Look past initial price. Consider the financing options available as well as day-to-day operating costs. This is also the time to look at dealer services that can be included in the cost of the machine to yield lower equipment owning and operating costs over the long run.

**Maintenance.** More and more equipment buyers are planning for effective maintenance before buying equipment. Choose from the dealer's wide range of maintenance services at the time of purchase. Repair option programs guarantee the cost of repairs up front. Diagnostic programs such as S•O•S oil analysis and Technical Analysis help avoid unscheduled repairs.

**Product support.** Nearly all parts are available at the Cat Dealer parts counter. Cat Dealers utilize a worldwide computer network to find in-stock parts to minimize machine downtime. Save money with remanufactured parts and receive the same warranty and reliability as new products at cost savings of 40 to 70 percent.

**Replacement.** Repair, rebuild or replace? Cat Dealers can help evaluate the cost involved so the right choice is made.

## Engine

Four-stroke cycle, four cylinder Caterpillar® 3054DIT turbocharged diesel engine. Meets EPA/CARB emissions engine regulations.

Ratings at 2200 RPM	kW	hp
Gross Power	80	107
Net Power	75	101

Ratings of Caterpillar machine engines are based on standard air conditions of 25 degrees C (77 degrees F) and 99 kPa (29.32") Hg dry barometer. Power is based on using 35 degree API gravity fuel having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 30 degrees C (86 degrees F) [ref. a fuel density of 838.9 g/L (7.001 lb/U.S. gal)]. Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator. No derating required up to 2134 m (7,000') altitude.

The following ratings apply at 2200 RPM when tested under the specified standard conditions for the specified standard:

Net Power	kW	hp	Ps
ISO 9249	75	101	102
ISO 3046	75	101	102
SAE J1349 (JAN)90	74	100	101
EEC 80/1269	75	101	102
DIN 6271/6272	77	103	104
Gross Power	kW	hp	Ps
ISO 14396	80	107	108

### Dimensions

Bore	100 mm	3.937"
Stroke	127 mm	5.0"
Displacement	4.0 L	243 cu. in

## Drive System

The drive utilizes a totally hydrostatic propel system. Engine mounted variable displacement pumps drive two-speed variable displacement wheel motors mounted directly to high torque, two-speed final drive. Planetary drive boxes have multi-disc parking brake.

### Forward speed ranges

Pave low	0-46 mpm	0-150 fpm
Pave high	0-76 mpm	0-250 fpm
Travel low	0-11,3 kmph	0-7 mph
Travel high	0-19 kmph	0-12 mph

Speeds may vary slightly due to type of tires used.

## Hydraulic Oil Filtration

Propel pumps and motors have 10-micron filters and the feeder pumps and motors have 10-micron filtration. Both have remote filter condition gauges. Vibrator pump has a 125-micron suction strainer at the inlet. The auxiliary pump has 125-micron strainers on both inlet and outlet. Return oil has a 10-micron filter with indicator.

## Suspension

Four front wheels, two per side, are mounted in tandem on bogie axles, equalizing ground pressure.

Drive Tires (sand rib, hydroflated)  
16:00 x 25

Steering Tires (solid rubber)  
330 mm x 559 mm (13" x 22")

## Steering

Steering is full power via an automotive-type steering wheel at the operator's station. Heavy duty tandem articulated dual bogies on each side are mechanically connected and guided by a single modulated hydraulic cylinder. Bogies are 350 mm (13") wide by 559 mm (22") diameter solid rubber tires.

Inside Turning Radius  
244 mm (9' 6")

## Brakes

Primary braking system: Hydrostatic transmission dynamic braking.

Parking brake system: Spring applied, hydraulically released parking brake, which is actuated by a switch on the console.

## Operator's Station

A single sliding operator's station can be positioned on either side of machine. Operator's platform can extend 305 mm (12") beyond machine side to provide excellent visibility fore and aft and to either side of the paver. Operator's seat can also swivel outside the side (2,5 m/8' 2" line) of paver for better visibility. Operator's console contains full instrumentation for operation of the machine. Deluxe seat with arm rests has heat-reflective cover.

## Operator's Console

Control console with lockable vandal cover includes: steering wheel, hopper raise/lower switch; left and right feeder auto/off/man switch; horn button; propel forward/reverse control lever; pave/travel high/low speed range selection switches; maximum speed control; engine ignition switch; parking brake switch; feeder gate control switches; screed vibrator switch on/off; screed lift switch up/down; and extender switches in/out.

Operator's console and station also includes: foot brake pedal; engine throttle fast/slow; auger raise/lower switch; and hydraulic limited slip lock on/off switch. the following are options: truck hitch control in/out; front wheel assist on/off switch; work lights on/off; hazard light on/off switch; and screed counterbalance system.

## Instrumentation

Operator's console includes: filter condition indicator light; system warning light for high hydraulic oil temperature, low hydraulic oil level, low engine oil pressure, and high water temperature; battery charging light; engine temperature gauge; fuel level gauge; oil pressure gauge; and hydraulic oil temperature gauge.

## Electrical System

The 24-volt electrical system utilizes two 12-volt batteries and a 24-volt, 55-amp alternator. The wiring is color coded and number impregnated for easy servicing. All wiring is protected by vinyl coated nylon braiding for greater durability.

## Ventilation System

The Ventilation System helps remove asphalt vapors from the auger chamber area. The system consists of a hydraulically driven exhaust fan, ducts and exhaust stack to vent asphalt vapors away from the operator and screed areas. Design provides unobstructed visibility to augers.

## Frame

H-section mainframe construction with integral tunnel cover. Frame fabricated from heavy gauge steel plate. Feeder base and tunnel cover are 12,8 mm (.5") thick, and the side plates are 15,8 mm (0.625") thick.

## Feeders and Augers

Variable proportional hydrostatically driven dual feeders and augers operate independently of forward speed. Right and left side augers/feeders operate independently of each other. Feeder drive and drive chains are located outside the mainframe for easy accessibility.

Feeder flights are constructed of heavy-duty bushed roller chain with forged steel flight bars sliding over replaceable, abrasion resistant drag pans with 360-440 Brinell hardness.

Long life auger system consists of segmented, 406 mm (16") diameter, cast Ni-Hard steel hemi-screw augers. Auger and hanger bearings have built-in steel shields for greater protection. Augers are driven independently by two motors. Each auger is controlled by an adjustable material flow switch. Manual override is provided. Auger height is hydraulically adjustable 171 mm (6.75").

## Hopper

Power hopper dumping, controlled from control console. Heavy-duty flashing prevents material spillage.

Capacity
5,5 cu m (195 cu ft)
Truck Entry Width
3182 mm (10' 5")
Truck Dump Height
584 mm (23")

## Service Refill Capacities

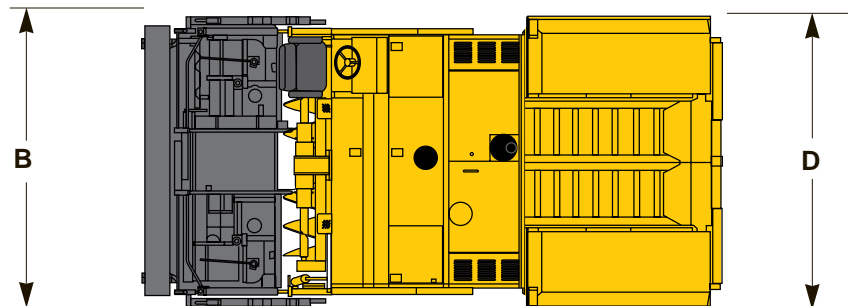
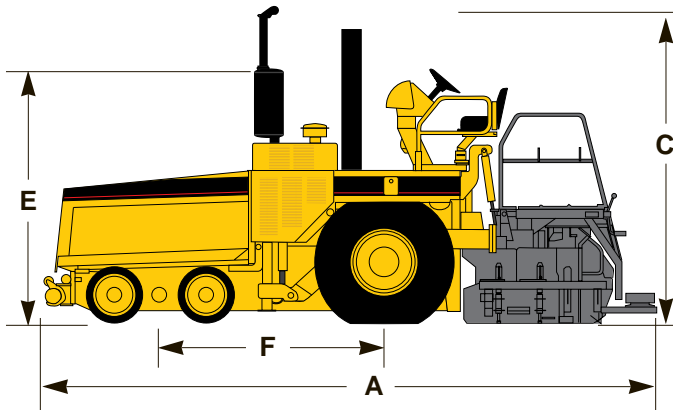
	Liters	Gallons
Fuel Tank	189	50
Hydraulic Oil Tank	189	50
Cooling System	19	5

## Weights (approximate)

With Extend-A-Mat 8-16B	15 195 kg (33,500 lb)
With Pavemaster 8B	13 575 kg (29,930 lb)
With Extend-A-Mat 10-20B	15 470 kg (34,100 lb)
With Pavemaster 10B	13 860 kg (30,550 lb)

## Dimensions

	Extend-A-Mat B Screed	Pavemaster B Screed
<b>A</b> Length with push roller with truck hitch	6508 mm (21' 3.25") 6966 mm (22' 10.25")	6013 mm (19' 8.75") 6496 mm (21' 3.75")
<b>B</b> Operating width 8' screed 10' screed	3269 mm (10' 8.7") 3327 mm (10' 11")	3269 mm (10' 8.7") 3327 mm (10' 11")
<b>C</b> Overall height	3023 mm (9' 11")	3023 mm (9' 11")
<b>D</b> Transport width (hoppers raised) with end gates 8' screed 10' screed	2718 mm (8' 11") 3327 mm (10' 11")	2718 mm (8' 11") 3327 mm (10' 11")
<b>E</b> Transport height (muffler removed) Transport width (hoppers raised) without end gates 8' models 10' models	2600 mm (8' 6.5") 2438 mm (8') 3048 mm (10')	2600 mm (8' 6.5") 2438 mm (8') 3048 mm (10')
<b>F</b> Wheelbase	2337 mm (92")	2337 mm (92")



# Optional Equipment

## Tractor

**Front Wheel Assist** adds hydrostatic propel power to two of the four front steering wheels. The system increases rimpull power 20 percent for better traction.

**Aggressive Tread Drive Tires** are available for applications requiring greater tractive effort. The AP-800C can be equipped with XGC radial tires that have a more aggressive tread than the standard sand rib tires.

**Oscillating Push Rollers** provide contact point between paver and truck to center load and assist steering.

**Truck Hitch** provides positive locking between paver and truck when unloading trucks. Hydraulically actuated from the operator's console.

**Lighting Package** consists of four variable position sealed beam flood lights, two mounted forward and two mounted to the rear, illuminate work area.

**Hazard Light** consists of rotating amber beacon and mount, increasing visibility during paving or roading of paver.

**Transverse Beam** is required when grade and slope controls are ordered and is available in 2,4 m (8') or 3 m (10') lengths.

**Sonic Feeder Sensor** replaces the paddle feeder control sensor. It uses high-frequency sound waves to detect material levels in front of the screed without the need to contact the material.

## Controls and References

**Automatic Grade and Slope Controls** is a proportional grade and slope control package that consists of grade and slope controls, mounting hardware, and tractor hydraulic and electrical systems.

**Non-Contacting Sonic Grad and Slope Controls** consists of two sonic sensors for grade control, one slope controller, two screed-mounted control units, mounting hardware, control cables, tractor electrical and hydraulic systems.

**Rigid Ski** is a triangular truss rigid ski that rides directly on the pavement. Grade sensor can reference directly off ski or a stringline mounted to the ski. Available in 9,1 m (30') and 12,2 m (40') lengths.

**Outboard Leveler** is a traveling multi-foot outboard mounted grade reference that provides a mean average on the surface on which it is operating. Available in 9,1 m (30') and 12,2 m (40') lengths.

**Inboard Leveler** is a traveling stringline with many of the features of the Outboard Leveler. Mounts ahead of the screed extensions and inboard of the screed end plate. Used when outboard referencing is not practical.

**Mobile Stringline** consists of a two-section arrangement of beams and sleds that mount outboard of the screed. Package includes beams, sleds, stringline, pivot pins, brackets and attaching hardware.

**Fore 'N Aft Leveler** is a traveling stringline that mounts inboard of the screed end plate and bridges the screed extensions to reference both ahead and behind the screed.

## Screeds

The AP-800C is offered with a choice of four screeds: the Extend-A-Mat 8-16B and 10-20B Screeds or the Pavemaster 8B and 10B Screeds. Paving packages are available for both screeds in widths to match the paving capability of the tractor.

## Extend-A-Mat B Screed Options

**Power Controls for Slope, Crown and Height** include electric motor-driven gearboxes that provide fingertip operation of main screed crown, extender slope and extender height adjustments.

**Screed Extensions** are available in 305 mm (1') and 711 mm (2' 4") widths. Heat is by convection from the main screed. Vibration is provided on the 711 mm (2' 4") extension.

**Cutoff Shoe Package** consists of one 305 mm (1') and one 610 mm (2') cutoff shoe to reduce paving width in 76 mm (3") increments.

**Bevel End Plates** available to bevel mat edges for 38 mm (1.5"), 51 mm (2"), 64 mm (2.5"), and 76 mm (3") pavement thickness.

**Berm Extensions** available in right or left configurations. Lengths offered: 357 mm (14"), 508 mm (20"), and 660 mm (26"). All have 457 mm (18") screed plates. Slope is adjustable from 0 to 127 mm (5") high at outside edge. Wiring harness for extender control box supplied.

## Pavemaster B Screed Options

**Power Crown** includes an electric motor-driven gearbox that provides fingertip control of main screed crown.

**Screed Extensions** available in 152 mm (6"), 305 mm (1'), 610 mm (2') widths with crown control, and 914 mm (3') widths. Heat and vibration available on 610 mm (2') and 914 mm (3') extensions.

**Hydraulic Strike Offs** are available to increase paving width to 1069 mm (3' 6") on either side of the screed. Power slope control of the strike-off moldboard and power adjustment of the moldboard height is standard. Paving width can be increased an additional 305 mm (1') with bolt-on strike off extensions.

QEHQ9699 (5-99)  
Replaces QEHQ9118-01

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Caterpillar follows a policy of continual product improvement.  
For this reason, some material and specifications could change without notice.

**CATERPILLAR®**