

AP-800D

Rubber Tire
Asphalt Paver

CAT[®]



Cat[®] 3054C ATAAC Turbocharged Diesel Engine

Gross power	97 kw (130 hp)
Hopper capacity	5.5 m ³ (195 ft ³)
Maximum paving width w/8-168	6.15 m (20' 2")
Maximum paving width w/AS2251	6.22 m (20' 4")

Engine

Four-stroke cycle, four cylinder Caterpillar 3054C ATAAC turbocharged, diesel engine. The engine meets U.S. EPA Tier 2 engine emissions regulations.

Ratings at 2200 RPM	kW	hp
Gross Power	97	130

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 ft) altitude.

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

Net Power	kW	hp
ISO 9249	93	125
SAE J1349	92	124
EEC 80/1269	93	125
DIN 6271/6272	96	128

Dimensions		
Bore	105 mm	4.12"
Stroke	127 mm	5.0"
Displacement	4.4 L	269 in ³

Service Refill Capacities

	Liters	Gallons
Fuel Tank	189	50
Engine Oil w/filter	9	2.4
Hydraulic Oil Tank	170	45
Cooling System	18	5

Hydraulic Oil Filtration

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

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:
2.90 m (9' 6")

Brakes

Primary braking system: Hydrostatic transmission dynamic braking. Secondary brake system: Spring applied, hydraulically released secondary brake, which is actuated by a switch on the console.

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 secondary 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 km/h	0-7 mph
Travel High	0-19 km/h	0-12 mph

Speeds may vary slightly due to the type of tires used.

Hopper

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

Capacity	5.5 m ³ (195 ft ³)
Truck Entry Width	3.18 m (10' 5")
Truck Dump Height	584 mm (23")

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")

Operator's Station

A single sliding operator's station can be positioned on either side of machine. The 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 beyond the side of the paver frame for better visibility. Operator's console contains full instrumentation for operation of the machine. The deluxe seat with armrests has a 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; secondary 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 high/low; auger raise/lower switch; and hydraulic limited slip lock on/off switch. The following are options: generator on/off, truck hitch control in/out; front wheel assist on/off switch; work lights on/off; hazard light on/off switch; and screed counterbalance system.

Generator System

The industrial, single-phase generator is hydraulically driven through a load-sensing, pressure-compensating pump. The hydraulically-driven pump provides quiet operation and a control manifold maintains constant electrical voltage frequency at both high and low idle.

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.

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. The design provides good visibility to the augers.

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. Electrical wiring is protected by vinyl coated nylon braiding for greater durability.

Auxiliary Power Panel

The auxiliary power panel supplies 8 kW of power that can be used to supply night-time lighting or to operate other job-site work tools. The power panel includes four 120-volt receptacles and two 240-volt receptacles.

Feeders and Augers

Variable proportional hydrostatically driven dual feeders and augers operate independently of forward speed. Right and left side 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").

Frame

The H-section mainframe is constructed with a tunnel cover. The frame is fabricated from heavy gauge steel plate. The feeder base and tunnel cover are 12.8 mm (0.5") thick, and the side plates are 15.8 mm (0.625") thick.

Weights (approximate)

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Tractor: with generator and auxiliary power panel	13 307 kg (29,310 lb)
with Extend-A-Mat® 8-16B (diesel heat)	16 030 kg (35,310 lb)
with Extend-A-Mat 8-16B (electric heat system)	16 530 kg (36,410 lb)
with AS2251 (diesel heat)	16 153 kg (35,580 lb)
with AS2251 (electric heat system)	16 485 kg (36,310 lb)

*The weights of the diesel heat screeds do not include the generator and auxiliary power panel options.

Dimensions

	w/8-16B Extend-A-Mat	w/AS2251
A Length with push roller with truck hitch	6.51 m (21' 3") 6.97 m (22' 10")	6.43 m (21' 1") 6.91 m (22' 8")
B Maximum operating width (tractor)	3.3 m (10' 10")	3.3 m (10' 10")
C Overall height	3.34 m (11')	3.34 m (11')
D Transport width (hopper raised) with end gates Transport width (hopper raised) without end gates	2.72 m (8' 11") 2.44 m (8')	2.72 m (8' 11") 2.44 m (8')
E Transport height (muffler, fumes stack and seat lowered)	2.63 m (8' 8")	2.63 m (8' 8")
F Wheelbase	2.34 m (7' 8")	2.34 m (7' 8")

