MONTANA
Department of Transportation

MDT-BRG-015 04/23

Montana Department of Transportation
Bridge Bureau
Approved Construction Equipment List

Make:	*CAT*
Model:	*PM-565B*
Equipment Type:	*Cold Planer*
Contractor Modifications:	*None*

Interstate Approval Conditions

Approval Type	***Crossing Only***
Speed:	***No Restriction***
Weight:	***83,600 lb or less***
Traffic:	***Approved with regular traffic***
Location Restrictions:	***No restriction***

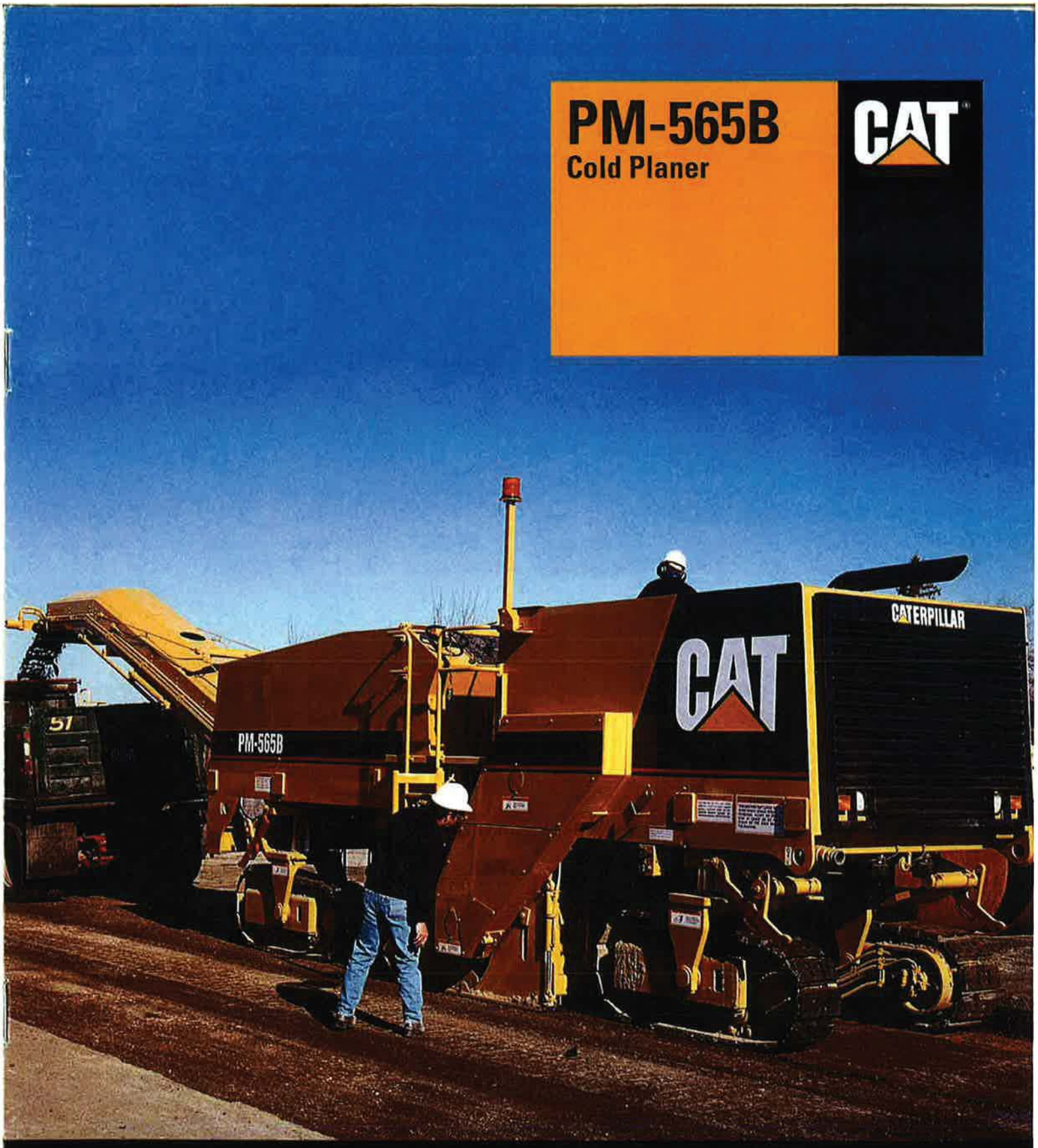
Non-Interstate Approval Conditions

Approval Type	***Denied***
Speed:	***Denied***
Weight:	***Denied***
Traffic:	***Denied***
Location Restrictions:	***Denied***

Comments:

Equipment configuration, weights, and specifications on following pages. Approval does not apply to posted bridges. Other construction equipment is not allowed to operate on or cross bridge at the same time this equipment is on the bridge. Equipment must be empty while crossing.

PM-565B
Cold Planer



Cat® 3408E HEUI Diesel Engine		
Gross power	466 kW	625 hp
Standard Cutting Width	2100 mm	83"
Maximum Cutting Depth	305 mm	12"

Diesel Engine

Caterpillar® 3408E HEUI diesel engine. EPA emissions certified through 2001.

Ratings at	RPM	kW	Hp
Gross power	2100	466	625
Net power	2100	450	603

The following ratings apply at 2100 RPM when tested under the specified standard conditions.

- Air conditions of 25°C (77°F) and 99 kPa (29.32" Hg) dry barometer.
- 35° API gravity fuel having an LHV of 42,780 kJ/kg (18,390 Btu/lb) when used at 30°C (86°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 air cleaner, muffler and alternator.
- No derating required up to 1500 m (4921 ft.) altitude.

Net Power	Kw	Hp	Ps
Caterpillar	450	603	–
EEC 80/1269	450	603	–
ISO 9249	450	603	–
SAE J1349 (JAN90)	445	596	–
DIN 70020	–	–	625
Gross Power			
ISO 3046-2	447	600	608
Dimensions			
Bore	137 mm		5.4"
Stroke	152 mm		6"
Displacement	18,01 liters		1099 cu in.

- Dual element dry-type air cleaner with primary and secondary elements has an automatic dust ejector and service indicator.
- 24-volt direct electric starting system with 100 amp alternator and two Caterpillar batteries.

Hydraulic System

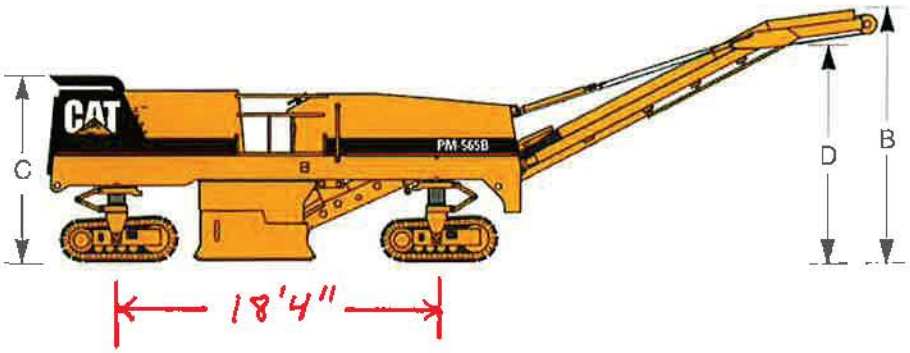
- Pumps for track drive, conveyor system, auxiliary hydraulics are installed on engine mounting pad.
- Hydraulic oil cooler adjacent to radiator.
- Three-micron filtration on pressure side of auxiliary flow; seven-micron filtration on return flow.
- Quick connect fittings for checking pressures.

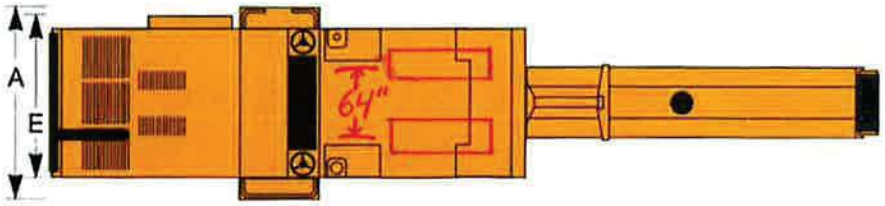
Service Refill Capacities

	Liters	Gallons
Fuel tank	946	250
Cooling system	151	40
Crankcase	45	12
Rotor Clutch Tank	35	9.2
Hydraulic system	132	35
Water system	3787	1000

Dimensions

Operating		
Length (conveyor up)	14,50 m	47' 6"
Width (**A**)	3151 mm	10' 4"
Maximum Height (**B**)	4535 mm	14' 11"
Minimum Height (**C**)	3224 mm	10' 7"
Maximum Truck Clearance (**D**)	3963 mm	13'
Rotor Ground Clearance	305 mm	12"
Weight (full water tank)	38 000 kg	83,600 lb
On front tracks	19 800 kg	43,600 lb
On rear tracks	18 200 kg	40,000 lb
Shipping		
Length		
Base machine	8250 mm	27'
With conveyor (down)	15,07 m	49' 5"
Maximum height (**C**)	2981 mm	9' 9"
Width (**E**)	2,5 m	8' 2"
Weight (empty water tank)	33 566 kg	74,000 lb
On front tracks	17 122 kg	37,746 lb
On rear tracks	16 444 kg	36,254 lb





Front tracks to back tracks = 18'4"

Track Width Separation - Center to Center = 64"

Brakes

Normal usage brakes

- Closed-loop hydrostatic drive provides dynamic braking during operation.

Parking brake features

- Button-actuated, spring-applied, hydraulically released disc brakes on all four tracks.
- Propel pump is destroked when parking brake is engaged. Propel lever must be returned to neutral after brake is released before machine will propel.

Propel System

- Four 2045 mm (80.5") long x 348 mm (14") wide tracks.
- Hydrostatic drive with hydraulic flow provided by variable displacement piston-type pump.
- Infinitely variable machine speed determined by propel lever.
- Load sensing system matches propel speed to load on rotor.

Speeds:

Operating	0-40 mpm	0-132 fpm
Travel	0-6,0 km/hr	0-3.7 mph

Rotor Drive System

- One 9-rib, high tensile strength V-belt drives the rotor through a planetary reduction gearbox inside the mandrel.
- Heavy-duty Cat wet clutch mounts directly to the engine.
- Clutch oil is routed through a separate filter and oil cooler and is used to lubricate upper and lower drive housings.
- Hydraulically powered automatic belt tensioner.
- Single caliper with dual disc brake installed on PTO drive shaft.

Water Spray System

- Centrifugal pump supplies water to spray nozzles for dust control and rotor tooth cooling.
- Water spay system operates only when the machine is moving to save water.
- Ground level water fill.

Tank capacity	3787 L	1000 gal.

Frame

- Fabricated unitized construction.
- Tread plate decking on top deck.

Steering

- Hydraulic steering with two steering wheels on operator's console.
- Double acting hydraulic cylinders on front and rear tracks.
- Four steering modes with automatic realignment: front, rear, crab and coordinated.

Min. turning radius	4,66 m 15' 4"

Rotor Assembly

- Triple-wrap flighting with weld-on tool holders.
- Tooth holders weld to flighting with dowel locator pins.
- Teeth are drive-in/knock-out style for fast replacement.
- Floating moldboard with adjustable down pressure standard.
- Height control for rotor and moldboard located at operator's station and at ground level.

Cutting Width	2100 mm	83"
Cutting Depth	305 mm	12"
Diameter (to tool tips)	1168 mm	46"
Number of tools		147

Conveyor System

- Height, swing and variable speed controlled from operator's station.
- Water spray bars with individual shut-off standard on both conveyors.

Collecting Conveyor:

Length	3740 mm	12' 3"
Width	914 mm	36"
Speed	192 mpm	630 fpm

Discharge Conveyor:

Length	7390 mm	24' 3"
Width	762 mm	30"
Min. Speed	158 mpm	520 fpm
Max. Speed	226 mpm	740 fpm
Speed w/boost	300 mpm	984 fpm
Swing		45°

Grade Control System

- Electronic over hydraulic grade and slope system with manual, automatic and calibrate modes.
- Two sonic sensor and on-board cross slope standard.
- Sensors read any reference between 457 mm (18") and 1400 mm (55") from bottom of sensor.
- Constant display of rotor height and slope at ground level and operator's station.