



Highway Maintenance Manual
Chapter 02 Administration
Section 25 Cost Invoicing
Subject 50 Classified Equipment Rates

Bureau of Highway Maintenance
Effective January 1, 2021

1.0 2021 Classified Equipment Rates Standard and Special Rated Units

<u>Class</u>	<u>Description</u>	<u>Rate</u>	<u>Est. Life</u>
AIR COMPRESSORS			
Rates are for the compressor and pneumatic tools used with the compressor, except breakers, jackhammers (class 929), and wagon drills. Rates do not include equipment used to transport the compressor.			
402	125 through 209 CFM -----	15.18/hr.	10 years
403	210 CFM and over-----	20.46/hr.	10 years
BITUMINOUS EQUIPMENT			
Note: Paver rates include the cost of automatic controls.			
701	Bitumen kettle, 1-2 bbls, inclusive, includes fuel -----	20.30/hr.	8 years
702	Bitumen kettle, 3-5 bbls, inclusive, includes fuel -----	23.64/hr.	8 years
707	Tank car heater (except wood or coal fired)-----	27.04/hr.	12 years
708	Trailer style distributor, including tank and equipment, but not the truck-----	38.26/hr.	12 years
709	Patch material heater and mixer (surge bin), trailer or truck mounted ----- (Alternate Photo)	16.40/hr.	12 years
710	Heating kettle, less than 300 gallons -----	42.66/hr.	8 years
711	Heating kettle, 300 gallons or more -----	50.00/hr.	8 years
712	Self-propelled paver and finishing machine -----	1.46/ton	8 years
713	Portable storage tank for oil/emulsion with heating unit; charge only for hours of heating or pumping-----	16.96/hr.	12 years
714	Portable supply or storage tank for oil/emulsion -----	123.14/day	12 years
716	Distributor, including truck, rear drive, 23,000 through 49,999 lbs-----	67.80/hr.	7 years
717	Distributor, including truck, tandem rear drive, 23,000 through 49,999 lbs-----	66.38/hr.	9 years
718	Distributor, including truck, tandem rear drive, 50,000 lbs and over -----	110.06/hr.	9 years
719	Pavement profiler, 2' and under, not self-propelled -----	46.26/hr.	10 years
720	Pavement profiler, self-propelled or not self-propelled over 2'----- (Alternate Photo)	84.00/hr.	8 years
GENERATORS, PORTABLE ELECTRIC			
805	3,001 watt output through 10,000 watt output-----	16.32/hr.	12 years
806	10,001 watt output and over-----	53.84/hr.	12 years

GRADERS, MOTOR

Note: The cost of automatic controls (i.e. lasers) is not included in the grader rates. A separate add-on rate for lasers is identified as class 315.

Classifications are in accordance with rated net flywheel horsepower (hp), exclusive of attachments. Horsepower shall be in accordance with Society of Automotive Engineers (S.A.E.) standard 1349.

302	Rear drive grader, less than 85 hp -----	35.38/hr.	10 years
305	Rear drive grader, 85 hp through 149 hp -----	57.30/hr.	10 years
307	Rear drive grader, 150 hp and greater -----	61.96/hr.	10 years
308	All wheel drive grader, any hp -----	72.06/hr.	10 years
315	Non-integrated, Slope control, used in grader -----	18.78/hr.	10 years

GRADERS, TOW TYPE ATTACHMENT

323	Any number of blades (Alternate Photo) -----	7.08/hr.	10 years
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MAINTAINER ATTACHMENTS

392	Hydraulically operated return blade-----	6.46/hr.	10 years
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MOWERS AND MOWER ATTACHMENTS

410	Motorized lawnmower, less than 60" cut-----	13.78/hr.	5 years
411	Motorized lawnmower, 60" cut or more -----	21.66/hr.	5 years
412	Disc bine attachment-----	27.72/hr.	10 years
413	Single pan section, rotary or flail attachment -----	14.92/hr.	10 years
414	Sickle bar attachment-----	15.52/hr.	10 years
415	2 pan section (single unit), rotary or flail attachment-----	22.04/hr.	10 years
416	3 pan section (single unit), rotary or flail attachment-----	23.90/hr.	10 years

COMPACTORS

531	Tow-type, including sheepsfoot, vibrating and non-vibrating----- (Alternate Photo) (Alternate Photo)	14.76/hr.	10 years
532	Self-propelled, non-vibratory-----	42.70/hr.	10 years
533	Self-propelled, vibratory, 1 through 2 tons-----	27.20/hr.	8 years
534	Self-propelled, vibratory, over 2 tons-----	34.96/hr.	8 years

SCRAPERS AND SCRAPER ATTACHMENTS

Scrapers are rated as a unit with the tractor used exclusively for scraper operation. Capacity is based on the manufacturer's truck capacity without sideboards.

546	Scraper, single engine-----	72.32/hr.	10 years
547	Scraper, twin-engine-----	102.80/hr.	10 years

SHOULDERING MACHINES

450	Shoulder reclaimer (Alternate Photo) -----	17.18/hr.	10 years
451	Shoulder machine attachment-----	74.76/hr.	10 years
455	Self-propelled, (road widener)-----	127.20/hr.	10 years

EXCAVATORS

Complete units classified by capacity, including the truck or tractor. Capacity is based on manufacturer's rating.

552	Truck mounted, including hydraulic cable operated combination backhoe units--	52.70/hr.	10 years
555	Track-type backhoe, through 99 hp -----	44.80/hr.	10 years
557	Self contained excavator, rubber tire -----	57.40/hr.	10 years
558	Shovel, track-type (100 through 149 hp)-----	48.66/hr.	10 years
559	Shovel, track-type (150 hp and over)-----	61.52/hr.	10 years

SNOW PLOWS, MOTOR GRADER AND TRACTOR ATTACHMENTS

612	Widening wing-----	32.98/hr.	10 years
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SNOW PLOWS, ATTACHMENTS

632	V-shape -----	32.78/hr.	10 years
633	Power reversible, truck mounted (Alternate Photo)-----	13.04	
	hr.		10 years
634	One-way (including motor grader or tractor attachments) -----	10.34/hr.	10 years
635	Widening wing-----	12.10/hr.	10 years
636	Underbody, fixed moldboard-----	15.34/hr.	10 years
637	Underbody, power reversible moldboard -----	18.18/hr.	10 years

SPREADER ATTACHMENTS

These attachments are for applying sand, chips, or deicers. Units purchased after 1/1/86 shall be capable of calibration within 10% of the recommended sodium chloride application rate (100 to 300 lbs./lane mile) at speeds of 15 to 35 miles per hour. The term "computer controlled" means that the controller receives a vehicle speed signal and a spreader feed signal (i.e., closed loop is terminology also used within the industry) and can be calibrated in pounds and liquid per mile. These controllers can be calibrated to apply the exact amount of granular and liquid material per mile at any speed.

420	Spreader, tailgate mounted, computer controlled with on board pre-wetting system (may include anti-icing spray bar)-----	13.72/hr.	8 years
421	Spreader, hopper type truck body with conveyor feeding material to power driven spinner type spreader, computerized, with on board pre-wetting system (may include anti-icing spray bar) -----	28.02/hr.	8 years
422	Hopper type truck body with conveyor feeding material to power driven spinner type spreader, non-computerized, with on board pre-wetting system -----	17.66/hr.	8 years

423	Spreader, tailgate mounted, non-computerized, with on board pre-wetting system -----	9.56/hr.	8 years
424	Tailgate mounted, non-computerized -----	10.62/hr.	8 years
425	Hopper type truck body with conveyor feeding material to power driven spinner type spreader, non-computerized (without pre-wetting system)-----	22.38/hr.	8 years
426	Tailgate mounted, computer controlled (without pre-wetting system) -----	12.58/hr.	8 years
427	Hopper type truck body with conveyor feeding material to power driven spinner type spreader, computerized (without pre-wetting system) ----- (Alternate Photo)	28.02hr.	8 years
428	Zero-velocity type spreader, includes 'pre-wetting' type system (may include anti-icing spray bar)-----	29.18/hr.	8 years

SPREADERS, SELF-PROPELLED CHIP

440	Single width with mechanical extension-----	150.38/hr.	10 years
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SWEEPERS AND ATTACHMENTS

431	Broom, power take-off or hydraulic pump driven, attached to separate vehicle class -----	36.24hr.	10 years
432	Broom, self-powered, pulled by separate vehicle-----	40.00/hr.	10 years
433	Street sweeper, mechanical debris collection system, self-propelled -----	92.48/hr.	10 years
434	Broom, self powered, self-propelled -----	44.10/hr.	10 years
435	Vacuum debris collection system, with or without sweeper, self-propelled (Alternate Photo) -----	81.02/hr.	10 years

TRACTORS/SKID STEERS/END LOADERS/DOZERS

These units shall be rated by net flywheel SAE horsepower (hp). Net horsepower shall be in accordance with Society of Automotive Engineers (SAE) standard 1349, and shall not exceed that stated in the manufacturer's national advertising.

202	Wheel-type, 12 through 34 hp -----	24.12hr.	10 years
203	Wheel-type, 35 through 49 hp -----	23.78/hr.	10 years
204	Wheel-type, 50 through 64 hp -----	30.52/hr.	10 years
205	Wheel-type, 65 through 79 hp -----	31.22/hr.	10 years
206	Wheel-type, 80 through 99 hp -----	31.34/hr.	10 years
207	Wheel-type, 100 through 149 hp-----	46.50/hr.	10 years
208	Wheel-type, 150 through 214 hp-----	59.02/hr.	10 years
209	Wheel-type, 215 hp and more -----	65.08/hr.	10 years
215	Track-type dozer, through 79 hp -----	44.80/hr.	10 years
216	Track-type dozer, 80 through 99 hp-----	43.72/hr.	10 years
217	Track-type dozer, 100 through 149 hp-----	46.48/hr.	10 years

218	Track-type dozer, 150 through 214 hp-----	85.02/hr.	10 years
219	Track-type dozer, 215 hp and more-----	76.58/hr.	10 years
221	Agricultural type tractor/skid steer, 4- wheel drive units, 20 through 64 hp----- (Alternate Photo) (Alternate Photo)	27.06/hr.	10 years
222	Agricultural type tractor/skid steer, 4- wheel drive units, 65 through 79 hp----- (Alternate Photo) (Alternate Photo)	28.68/hr.	10 years
223	Agricultural type tractor/skid steer, 4- wheel drive units, 80 through 99 hp----- (Alternate Photo) (Alternate Photo)	32.94/hr.	10 years
224	Agricultural type tractor/skid steer, 4- wheel drive units, 100 up to 175 hp-----	39.60/hr.	10 years
250	Backhoe/loader/tractor, (80 hp and over)-----	50.30/hr.	10 years

TRAILERS

Classification shall be based on the manufacturer's rated capacity for the specific model trailer

490	Less than 1 ton (use manufacturer's rated capacity) -----	10.66/hr.	10 years
491	1 through 4 tons (use manufacturer's rated capacity) -----	14.10/hr.	10 years
493	5 through 29 tons (use manufacturer's rated capacity)-----	21.04/hr.	10 years
496	30 tons and over (use manufacturer's rated capacity)-----	36.92/hr.	10 years

TRUCKS

Classifications shall be based on the manufacturer's gross vehicle weight (GVW) rating assigned to the specific model, including all component equipment recommended or required by the manufacturer, as listed in the current national advertising and specifications. No consideration shall be given to any GVW that may be assigned for a specific purpose, preferred service, limited area, or that is not included in the national advertising for that model. If optional GVW's or a range of GVW's are given without identifying equipment necessary to place the unit within the range, the average of the range shall be used.

The washing of trucks performing winter activities shall be charged to the job using activity code 072 in accordance with the truck washing parameters identified in HMM 02-25-01, Activity Codes. All other (non-winter) truck washing shall be charged to the truck unit.

101	Rear drive or 4wd, 15,000 lbs and less -----	14.16/hr.	6 years
103	Rear drive or 4wd, 15,001 through 17,999 lbs-----	17.82/hr.	6 years
104	Rear drive or 4wd, 18,000 through 22,999 lbs-----	24.26/hr.	6 years
106	Rear drive or 4wd, 23,000 lbs through 50,000 lbs -----	53.82/hr.	10 years
112	Rear drive, 4wd or 6wd, more than 50,000 lbs (Alternate Photo) -----	64.64/hr.	15 years
117	Tandem rear drive through 49,999 lbs -----	46.92/hr.	9 years
118	Tandem rear drive, 50,000 lbs and over -----	68.52/hr.	9 years
1118	Tandem rear drive, 50,000 lbs and over, with tri-axles -----	60.20/hr.	9 years
1128	Tandem rear drive, 50,000 lbs and over, with quad-axles-----	48.94/hr.	9 years

VEHICLES

114	Automobiles -----	0.78/mile	100,000mi
115	Commissioner Vehicle (Administration Account) -----	set rate locally	100,000mi
119	Vans and SUV's -----	14.98/hr.	5 years
120	Patrol superintendent vehicles -----	0.54/mile	100,000mi

MISCELLANEOUS EQUIPMENT

901	Backhoe attachment/Grapple (Alternate Photo) -----	12.50/hr.	10 years
902	Brush chipper -----	30.62/hr.	8 years
906	Mechanical tamper, self-powered -----	31.36/hr.	8 years
907	Ripper attachments for graders or tractors -----	124.78/hr.	10 years
908	Surge bin -----	57.06/hr.	15 years
910	Arrow board, self contained on trailer or truck mounted -----	3.58/hr.	10 years
911	Conveyor -----	15.54/hr.	12 years
912	Mudjack -----	43.88/hr.	10 years
915	Post hole digger (auger), attachment -----	30.10/hr.	10 years
918	Screening plant -----	0.34/ton	10 years
919	Spring tooth or disc harrow attachment -----	11.74/hr.	10 years
923	Water pump, centrifugal (with or without trailer) (Alternate Photo) -----	25.90/hr.	5 years
924	Water pump, diaphragm -----	19.28/hr.	5 years
925	Sprayer, multi-purpose stand alone, liquid distribution system, including tank, spray bar, nozzles, to be used for spot weed spraying or dust control, excluding anti-icing. -----	13.88/hr.	10 years
926	Water tanker or portable tank with pump and spray bars, not for anti-icing, exclusive of motive equipment (no charge may be made while in transit) ----- (Alternate Photo)	26.76/hr.	8 years
930	Hydro-seeder with water supply -----	47.72/hr.	10 years
931	Mulch spreader with water supply -----	52.64/hr.	10 years
932	Brush cutter, (backhoe mounted on boom) (Alternate Photo) -----	27.74/hr.	5 years
933	Shoulder drag -----	16.76/hr.	10 years
934	Concrete saw, through 9 hp, including blades -----	52.54/hr.	3 years
935	Concrete saw, 10 through 24 hp, including blades -----	45.56hr.	5 years
936	Concrete saw, 25 hp and over, includes blades -----	71.94/hr.	10 years
937	Hot air lance -----	6.48/hr.	5 years
938	Pavement router/joint cleaner/roto-cutter, asphalt, including bits -----	43.10/hr.	5 years

939	Field office, Class A -----	73.96/day	15 years
940	Brush cutter (tractor mounted)-----	21.46/hr.	3 years
941	Bump burner, infrared or open flame grader attach -----	108.76/hr.	12 years
942	Post pusher/driver (wood or metal)-----	22.98/hr.	12 years
946	Trailer, sign-----	12.72/day	10 years
947	Portable pressure washer (heated or not heated) - attached wheels, capacity thru 20 hp -----	41.56/hr.	10 years
948	Aerial platform (self-propelled or trailer mounted / not mounted on a truck) -----	16.18/hr.	12 years
949	Attenuator (with or without arrow board)-----	11.00/hr.	10 years
950	Centerliner, mounted on dual axle truck -----	92.48/hr.	10 years
951	Centerliner, mounted on single axle truck -----	82.20/hr.	12 years
952	Liquid dust control, applicator only -----	0.16/gal	8 years
953	Boom for mowers, attached to tractor -----	15.12/hr.	10 years
954	Sign truck, any combination of storage cabinets, auger and aerial platform (primarily used for installing signs) -----	28.30/hr.	10 years
955	Tailgate conveyor or spreader box -----	30.02/hr.	12 years
956	Hydraulic drill -----	27.12/hr.	8 years
958	Message board (programmable) maximum charge of 12 hours in a 24 hr period -----	5.12/hr.	10 years
960	Portable pressure washer (heated or not heated) - attached wheels, capacity 21 hp and greater -----	47.92/hr.	10 years
970	Boom utility truck, any combination of storage cabinets, auger and man bucket (not primarily used for sign installation)-----	59.68/hr.	10 years
975	Welder, electric, 0 - 300 amp capacity (does not include cost of welding rod) -----	2.88/hr.	10 years
976	Welder, electric, 301 amp capacity and up (does not include cost of welding rod) -----	6.18/hr.	10 years