

D475A-8

Crawler dozer



Safety



Reliability



Productivity



Net horsepower

Forward 664 kW 890 HP @ 2000 rpm
Reverse 722 kW 968 HP @ 2000 rpm

Operating weight

115 300 kg (254,195 lbs.)

Blade capacity (ISO9246)

Semi-U Dozer: 27.2 m³ (35.6 yd³)
U Dozer: 34.4 m³ (44.5 yd³)

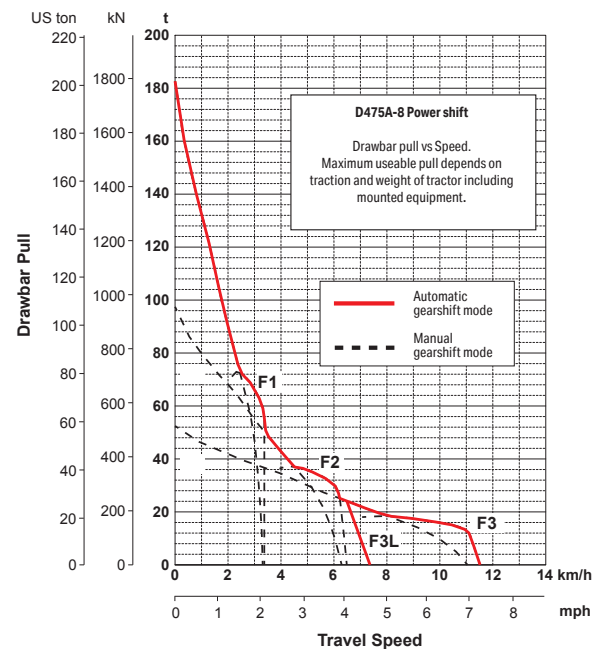
Engine

Model	Komatsu SAA12V140E-7	
Type	4-cycle, water-cooled, direct injection	
Aspiration	Turbocharged, air-to-air charge air cooler, cooled EGR	
Number of cylinders	12	
Bore x stroke	140 mm x 165 mm (5.51 in x 6.50 in)	
Piston displacement	30.48 L (1,860 in ³)	
Governor	Mid-range, electronic	
Horsepower		
SAE J1995	Gross: Forward 697 kW 934 HP	Reverse 777 kW 1040 HP
ISO 9249/SAE J1349*	Net: Forward 664 kW 890 HP	Reverse 722 kW 968 HP
Rated rpm	2000 rpm	
Fan drive type	Hydraulic	
Lubrication system		
Method	Gear pump, force lubrication	
Filter	Full-flow	
*Net horsepower at the maximum speed of radiator cooling fan	Forward/reverse 641/722 kW 860/968 HP	
	U.S. EPA Tier 4 Final emission certified	

Torqflow transmission

Komatsu TORQFLOW transmission consists of a water-cooled, 3-element, 1-stage, 1-phase torque converter with lockup clutch and a planetary gear, multiple-disc clutch transmission which is hydraulically actuated and force-lubricated for optimum heat dissipation. Gearshift lock lever and neutral safety switch prevent accidental starts.

Gear	Forward	Reverse
1st	3.4 km/h (2.1 mph)	4.4 km/h (2.7 mph)
2nd	6.3 km/h (3.9 mph)	8.4 km/h (5.2 mph)
3rd L	7.4 km/h (4.6 mph)	9.0 km/h (5.6 mph)
3rd	11.6 km/h (7.2 mph)	14.3 km/h (8.9 mph)



Final drives

Double-reduction final drive of spur and planetary gear sets to increase tractive effort and reduce gear tooth stresses for long final drive life. Segmented sprocket teeth are bolt-on for easy replacement.

Steering system

Palm Command Control System (PCCS), joystick controlled, wet multiple-disc steering clutches are spring-loaded and hydraulically released. Wet multiple-disc, pedal/lever controlled steering brakes are spring-actuated hydraulically released and require no adjustment. Steering clutches and brakes are interconnected for easy, responsive steering.

Minimum turning radius 4.6 m (15 ft 1 in)

Undercarriage

Suspension Oscillating equalizer bar with shoulder pad and pivot shaft
 Track roller frame Cylindrical, high-tensile-strength steel construction
 Rollers and idlers Lubricated track rollers
 Komatsu Bogie (K-Bogie) undercarriage

Lubricated track rollers are resiliently mounted to the track frame with a bogie suspension system whose oscillating motion is cushioned by rubber pads.

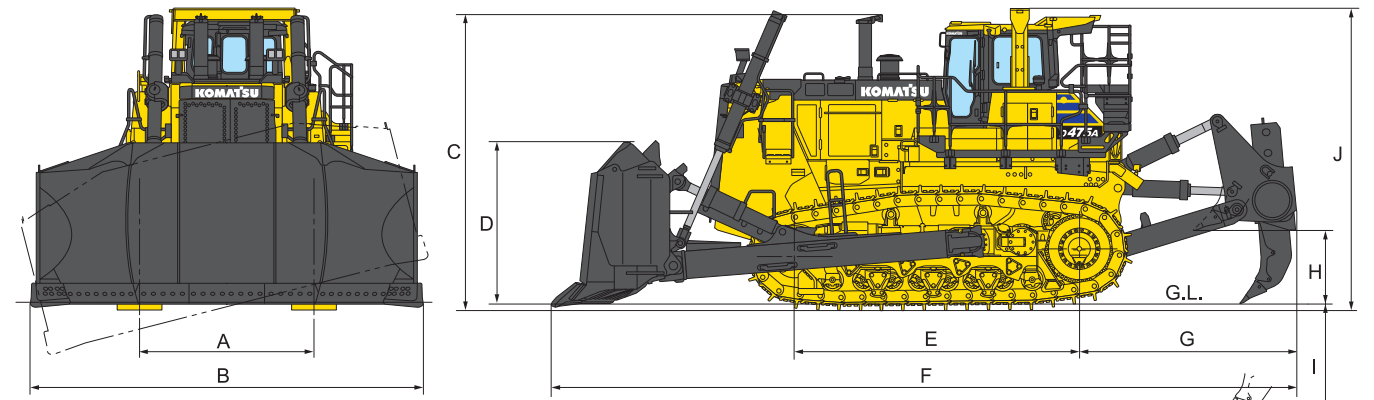
Extreme service track shoes
 Lubricated tracks. Unique seals prevent entry of foreign abrasives into pin to bushing clearances to provide extended service life. Track tension is easily adjusted with grease gun.

Number of shoes (each side)	41		
Grouser height (single grouser)	105 mm (4.1")		
Shoe width (standard)	710 mm (28")		
Ground contact area*	64 240 cm ² (9,957 in ²)		
Ground pressure (tractor)**	115.2 kPa 1.18 kg/cm ² (16.71 psi)		
Number of track rollers	8		
Number of carrier rollers	2		
Extreme service shoes	Additional weight	Ground contact area*	Ground pressure**
810 mm (32 in)	920 kg (2,028 lbs.)	73 290 cm ² (11,360 in ²)	118 kPa 1.20 kg/cm ² (17.1 psi)
910 mm (36 in)	1 830 kg (4,034 lbs.)	82 340 cm ² (12,763 in ²)	106.1 kPa 1.08 kg/cm ² (15.4 psi)

*Ground contact area calculated by track on ground, center idler to center sprocket
 **Ground pressure calculated using ISO 16754

Coolant and lubricant capacity (refill)

Fuel tank	1 920 L (507.2 US gal)
Coolant	265 L (70 US gal)
Engine	120 L (31.7 US gal)
Torque converter, transmission, bevel gear, and steering system	210 L (55.5 US gal)
Final drive (each side)	75 L (19.8 US gal)



Ground clearance 615 mm (2 ft)

Dimensions

A	2 770 mm (9 ft 1 in)
B	6 205 mm (20 ft 4 in)
C	4 710 mm (15 ft 5 in)
D	2 610 mm (8 ft 7 in)
E	4 525 mm (14 ft 10 in)
F	11 800 mm (38 ft 9 in)
G	3 430 mm (11 ft 3 in)
H ¹	1 210 mm (4 ft)
I ²	1 845 mm (6 ft 1 in)
J	4 795 mm (15 ft 9 in)

*1 Maximum lift above ground
 *2 Maximum drop below ground

Operating weight

Tractor	88 200 kg (194,450 lbs.)
Including rated capacity of lubricant, coolant, full fuel tank, operator, and 710 mm (28") shoe, less front and rear attachments.	
Operating weight	115 300 kg (254,195 lbs.)
Includes dual tilt U dozer, giant variable ripper, cab, ROPS (ISO 3471), operator, standard equipment, rated lubricant volumes, coolant, full fuel tank and 810 mm (32") track shoes.	
Ground pressure*	1.36 kPa 133.4 kgf/cm ² (19.35 psi)

*Ground pressure calculated using ISO 16754

Dozer equipment

Blade capacities are based on the ISO recommended practice 9246.

	Overall length with dozer	Blade capacity* (ISO 9246)	Blade length x height with spill guard	Maximum lift above ground	Maximum drop below ground	Maximum tilt adjustment	Weight		Ground pressure** (ISO16754)
							Dozer equipment	Hydraulic oil	
Dual tilt semi-U dozer	8 900 mm (29 ft 2 in)	27.2 m ³ (35.6 yd ³)	5 265 mm x 2 690 mm (17 ft 3 in x 8 ft 10 in)	1 650 mm (5 ft 5 in)	900 mm (2 ft 11 in)	1 145 mm (3 ft 9 in)	18 300 kg (40,345 lbs.)	109 kg (240 lbs.)	131.6 kPa 1.34 kgf/cm ² (19.1 psi)
Dual tilt U dozer	9 400 mm (30 ft 10 in)	34.4 m ³ (44.5 yd ³)	6 205 mm x 2 610 mm (20 ft 4 in x 8 ft 7 in)	1 650 mm (5 ft 5 in)	900 mm (2 ft 11 in)	1 350 mm (4 ft 5 in)	19 900 kg (43,872 lbs.)	109 kg (240 lbs.)	133.4 kPa 1.36 kgf/cm ² (19.4 psi)

*Blade capacities are based on the ISO recommended practice 9246.

**Ground pressure shows tractor with cab, ROPS (ISO 3471), giant variable ripper, 32 in extreme service shoes, standard equipment and applicable blade. Ground pressure calculated using ISO 16754

Hydraulic system

Hydraulic control unit		
Closed-center load sensing system (CLSS) designed for precise and responsive control, and for efficient simultaneous operation.		
All spool control valves externally mounted beside the hydraulic tank. Variable piston pump with capacity (discharge flow) of 541 L/min (142.9 US gal/min) for implement at rated engine rpm.		
Relief valve setting	For implement 27.5 MPa 280 kgf/cm ² (3,983 psi)	
Control valves		
Spool control valve for Semi-U tilt dozer and U tilt dozer.		
Positions: blade lift	Raise, hold, lower, and float	
blade tilt	Right, hold, and left	
Additional control valve required for variable digging angle multi-shank ripper and giant ripper.		
Positions: ripper lift	Raise, hold, and lower	
ripper tilt	Increase, hold, and decrease	
Hydraulic cylinders Double-acting, piston		
	Number of cylinders	Bore
Blade lift	2	180 mm (7.1")
Blade tilt (single tilt)	1	250 mm (9.8")
Blade tilt (dual tilt)	2	250 mm (9.8")
Ripper lift	2	225 mm (8.9")
Ripper tilt	2	225 mm (8.9")
Hydraulic oil capacity (refill)		
Semi-U dozer or U dozer	190 L (50.2 US gal)	
Ripper equipment (additional volume)		
Giant ripper	130 L (34.3 US gal)	
Multi-shank ripper (variable)	130 L (34.3 US gal)	

Operator environment and equipment

Air conditioner and heater with automatic climate control and defroster	●
Back-up alarm	●
Decelerator pedal	●
Double wiper for cab door	●
Finger Command Control (FCCS) steering system	○
Horn, warning	●
LED lighting package	
Access lamps (4)	
Additional cab mount (4)	
Front fender mount (2)	
High mount on hood (2)	
Rear fender mount (2)	
Ripper point light	
Lunch box holder	●
Mirror, rearview	●
Palm Command Control Steering (PCCS) system	●
Power ladder	○
Provisions for power ladder installation	●
Radio, AM/FM, AUX, bluetooth	●
Rearview monitoring system	●
ROPS (meets ISO 3471 standards)	●
Weight: 1,634 lbs. (741 kg.)	
Width: 6'11" (2,098 mm.)	
Height: 6'3" (1,910 mm) (compartment floor to ceiling)	
Seat	●
Air suspension, fabric, low back rest, head rest, heated and ventilated	
Seat belt, 3" retractable	●
Uninterrupted power source for 3rd party system	●

Powertrain

Auto/manual gearshift (3F/3R) TORQFLOW transmission	●
Torque converter with lock-up clutch	
Alternator, 140 Amps, 24V	●
Batteries, large capacity, 4 x 12 V, 160 Ah	●
Circuit breaker panel w/ push button resets	●
Dry-type air cleaner with dust evacuator and dust indicator	●
Electrical engine oil and coolant heaters	●
Engine intake precleaner	●
Engine prelubrication system	●
Final drive scraper, wear guard	●
Hydraulically driven radiator fan, swing out, reversible	●
Perforated side covers	●
Radiator, fin and tube type, copper core	●
Starting motors, 15 kW. (2 x 7.5 kW.), 24 V	●
Steering, wet clutch and brake	●

Undercarriage

Extreme service shoes with cold link assemblies	
28" (710 mm.) shoe width	●
32" (810 mm.) shoe width	○
36" (910 mm.) shoe width	○
Hydraulic track adjusters	●
Idle spring tensioner, additional preload	●
Labyrinth-type track rollers	●
Segmented sprocket segments	●
Track roller guards	●

Dozer equipment

Blade Semi-U, strengthened dual-tilt, 35.6 yd3 (27.2 m3)	○
Blade Full-U, strengthened dual-tilt, 45.0 yd3 (34.4 m3)	○
Hydraulics and cab controls for dual-tilt dozer equipment	●
Straight fame assembly, dual-tilt, less blade	○

Rear attachment

Counterweight with hitch - 13,395 lbs. (6,076 kg.)	○
Counterweight, additional with hitch - 14,509 lbs. (6,581 kg.)	○
Hydraulics and cab controls for giant variable ripper	●
Ripper assembly, giant variable, long protector	○
Variable, single shank ripper ideal for tough ripping applications. Ripping angle is variable. Ripping depth is adjustable with a hydraulically controlled pin-puller	
Weight: 15,895 lbs. (7,210 kg.)	
Beam length: 4'11" (1,500 mm.)	
Maximum lift above ground: 4'0" (1210 mm.)	
Maximum digging depth: 6'1" (1,845 mm.)	
Ripper Assembly, multi-shank	○
Three shank assembly with hydraulically controlled lift and tilt functionality.	
Weight: 21,430 lbs. (9,720 kg.)	
Beam length: 10'1" (3,085 mm.)	
Maximum lift above ground: 4'0" (1,210 mm.)	
Maximum digging depth: 4'1" (1,240 mm.)	

Service and maintenance

Anchor points for service lanyards	●
Canister-type, remote breathers	●
Centralized greasing (blade cylinder yoke and Ripper)	●
Concentrated live oil sampling ports	●
Engine emergency stop system	●
Engine room light	●
Electrical dust indicator	●
Electrical engine oil level sensor	●
Electrical hydraulic oil level sensor	●
Fast fill fuel system	●
Hinged underguards with front pull hook	●
Isolators, battery and starter	●
Jump start receptacle	●
Service fill and evacuation center, ground-level	●
Hyd. oil, eng. oil, T/M oil, and coolant	
Platform with hand rails and toe boards	●
PM service connectors	●
Radiator site gauge	●
Vandalism protection kit (cover locks)	●

Technology

Auto-idle stop system	●
Auto-pitch blade control	●
Auto-ripper return	●
KOMTRAX PLUS® WITH Iridium + WIFI	●
Track shoe slip control	●

Special arrangements

Cold area arrangement (-30 C° - +40 C°)	●
High altitude arrangement	●
Mining specification	●
MSHA regulation arrangement (dust)	●
OSHA (USA) regulation arrangement	●
Sandy and dusty area arrangement	●

Further equipment on request

- standard equipment
- optional equipment

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