BULLDOZER

D355A-3

FLYWHEEL HORSEPOWER: 410 HP (306 kW)/2000 RPM
OPERATING WEIGHT (TRACTOR): 36280 kg (79,980 lb)

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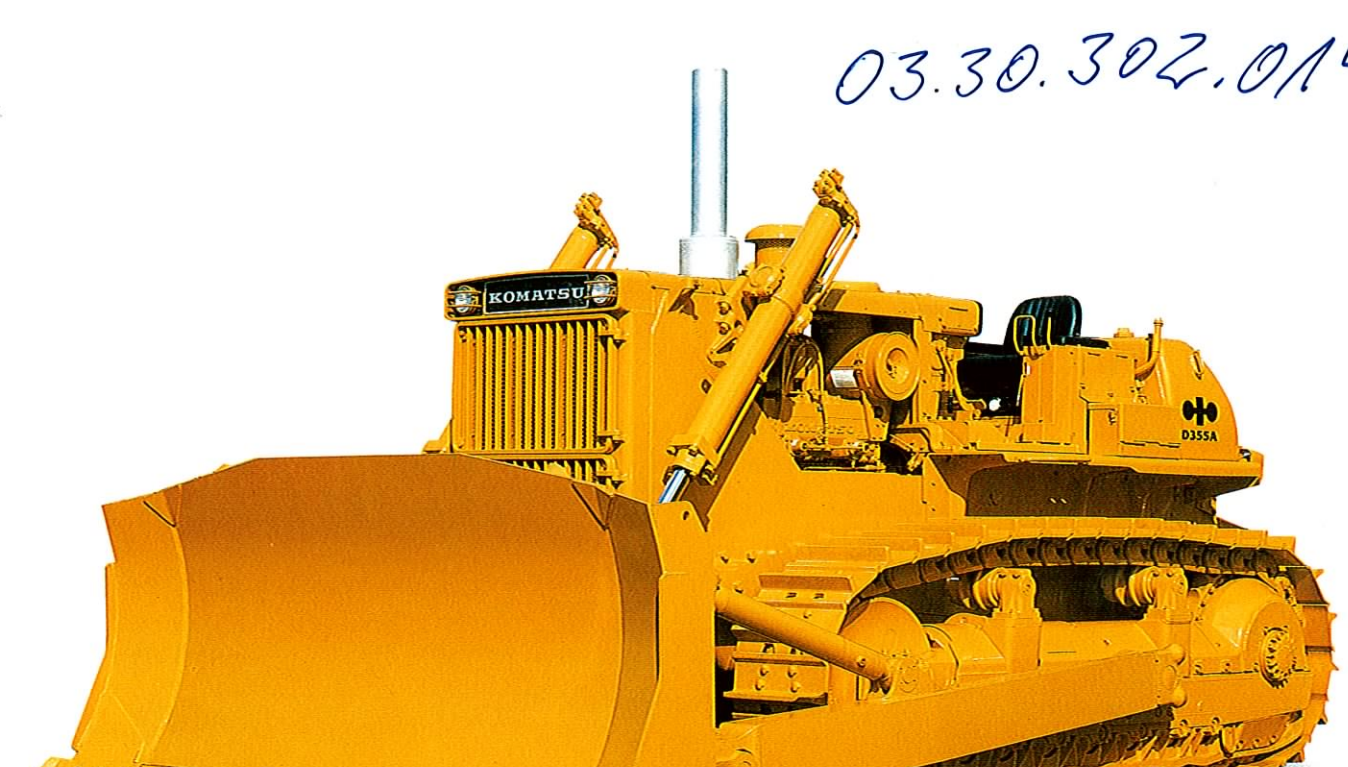


- Komatsu turbocharged and after-cooled SA6D155-4A diesel engine for power, efficient operation and ample power reserve even at high altitudes up to 3000 m (9,840 ft) without fuel-injection adjustment.
- Komatsu TORQFLOW for smooth, responsive power shift with single-lever control assuring instant speed and directional changes.
- Interconnected, wet-type steering clutches and brakes for easy operation and long service life. Steering clutches require no adjustment.
- Hydraulic servo valve for light-touch blade controls.
- Greater durability with high-tensile-strength steel in blade, track frame and other components.
- Well-upholstered, reclining oil-suspension seat insulated against shocks and vibrations for maximum operator comfort. Adjustable fore/aft, up/down. Spring hardness also adjustable to fit operator's weight.
- Floating seals in track and carrier rollers and idlers to keep dirt out and lubricant in for extended undercarriage life and reduced maintenance time and cost.
- Unique Komatsu dust seals between track links and pins to prevent abrasive dirt and mud from entering pin-to-bushing clearances and lengthening link pitch for longer track service.

KOMATSU LTD.

D355A SPECIFICATIONS

ENGINE

Komatsu SA6D155-4A 4-cycle, water-cooled, turbocharged diesel engine with aftercooler, 6 cylinders with 155 mm (6.10") bore x 170 mm (6.69") stroke and 19.26 ltr cc (1,175 cu.in) piston displacement.

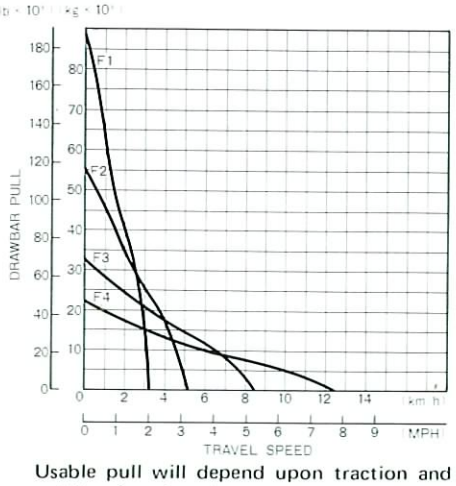
Flywheel horsepower . . . . . 410 HP (306 kW) at 2000 RPM
Max. torque . . 176 kg-m (1,273 lb-ft/1725 N-m) at 1400 RPM
Performance of standard engine equipped with fan, air cleaner, alternator, water pump, lubricating oil pump, muffler and fuel pump under SAE standard ambient temperature (29.4°C, 85°F) and barometric conditions (745 mmHg, 29.38"Hg).

Direct injection for fuel economy. Mechanical all-speed governor. Gear-pump-driven forced lubrication with full-flow and bypass filters (double filtering system). No fuel injection adjustment required up to altitudes of 3000 m (9,840 ft) to keep up with rated engine output. Dry-type air cleaner with automatic dust ejector for longer element service and dust indicator for simplified maintenance. Electrical 24-volt starting system.

TORQFLOW TRANSMISSION

Komatsu's unique TORQFLOW transmission consisting of water-cooled, 3-element, single stage, single-phase torque converter and a planetary-gear, multiple-disc clutch transmission, which is hydraulically actuated and forced-lubricated for optimum heat dissipation. Offers single-lever control of speed (4 forward and 4 reverse) and directional changes. Optimum machine speed obtainable at all times to match job. Gearshift lock lever and neutral safety switch to prevent machine from accidentally start.

Travel speeds	Forward	Reverse
1st	0– 3.3 km/h (2.1 MPH)	0– 3.2 km/h (2.0 MPH)
2nd	0– 5.1 km/h (3.2 MPH)	0– 5.0 km/h (3.1 MPH)
3rd	0– 8.5 km/h (5.3 MPH)	0– 8.4 km/h (5.2 MPH)
4th	0–12.7 km/h (7.9 MPH)	0–12.6 km/h (7.8 MPH)



Usable pull will depend upon traction and weight of equipped tractor.

STEERING

Lever-controlled, wet, multiple-disc steering clutches that are hydraulically actuated and require no adjustment.
Wet, contracting-band, one-foot-operated steering brakes with hydraulic booster for light-touch control and long service life. Steering clutches and brakes interconnected for easy steering.

FINAL DRIVE

Double-reduction final drive of spur and planetary gears to minimize transmission of shocks to power-train components. Segmented sprocket rims are bolt-on type for easy on-the-field replacement.

UNDERCARRIAGE

Suspension . . . . . Oscillation-type equalizer bar
Track roller frame . . . . Box-section, high-tensil-strength steel construction.

Rollers and idlers
Lifetime-lubricated track, carrier rollers and idlers are completely sealed with floating seals.
Number of track rollers (each side) 7
Number of carrier rollers (each side) 2

Track shoes
Strengthened, single-grouser shoes. Unique W-shaped dust seals for preventing entry of dust into pin-to-bushing clearances for extended service. Track tension easily adjusted with grease gun.
Number of shoes (each side) 39
Grouser height . . . . . 88 mm (3.5")
Shoe width (standard) . . . . . 610 mm (2')
Ground contact area . . . . . 40990 cm^2 (6,350 sq.in)
Ground pressure . . . . . 0.89 kg/cm^2 (12.66 PSI/87.3 kPa)

COOLANT & LUBRICANT CAPACITY (Refilling)

Coolant . . . . . 180 ltr (47.6 U.S. Gal)
Fuel tank . . . . . 750 ltr (198.2 U.S. Gal)
Engine . . . . . 71 ltr (18.8 U.S. Gal)
Torque converter, Transmission, Bevel gear, Steering system . . . . . 230 ltr (60.8 U.S. Gal)
Final drive (each side) . . . . . 68 ltr (18.0 U.S. Gal)

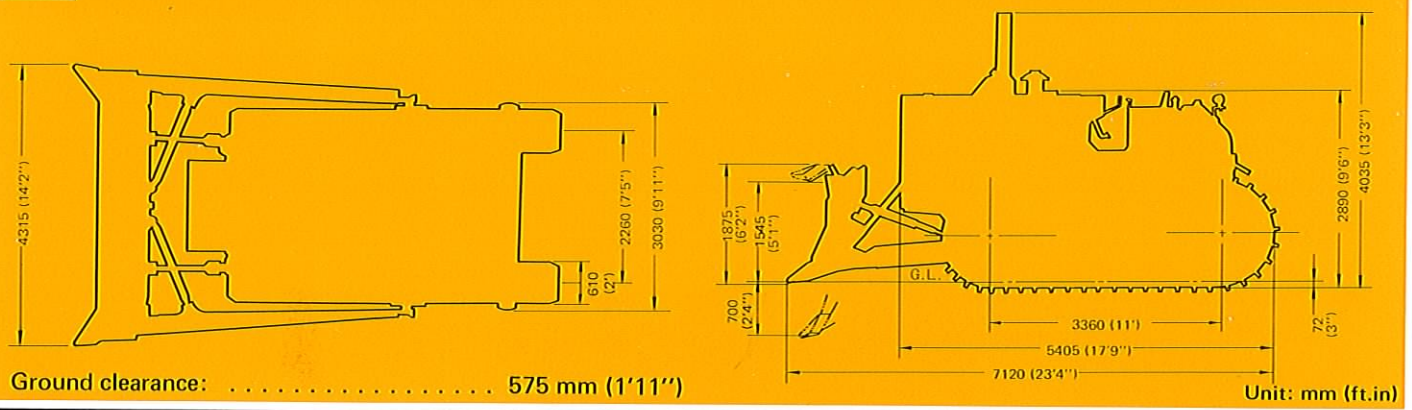
TRACTOR WEIGHT (approximate)

Operating weight, including rated capacity of lubricant, cool and fuel . . . . . 36280 kg (79,980 lb)

STANDARD EQUIPMENT

- TORQFLOW transmission
- 610 mm (2') single-grouser shoes
- Hydraulic track adjusters
- 24 V, 35 A alternator
- 24 V, 11 kW electric starting motor
- Segmented track-roller guards
- Decelerator pedal
- Segmented sprockets
- Front pull hook
- Oil-suspension seat
- Dry-type air cleaner with automatic dust ejector and dust indicator
- 24 V (12 V x 2), 170 AH batteries
- Lower guard (5 pieces)
- 7-roller track frame
- Lighting system (including one rear and two front lights)
- Wet-type steering clutches and brakes
- Final-drive-case wear guard
- In-line radiator
- Tool kit and usual spare parts

DIMENSIONS (Straight-tiltdozer)



Ground clearance: . . . . . 575 mm (1'11")

Unit: mm (ft.in)

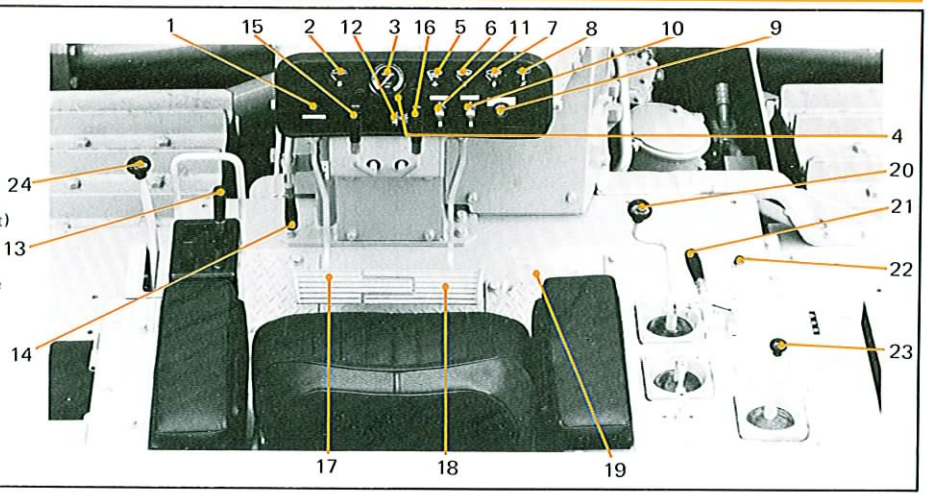
CONTROLS

Meters and gauges
1. Engine oil filter caution lamp
2. Fuel gauge
3. Tachometer
4. Heater signal
5. Engine oil pressure gauge
6. Engine water temperature gauge
7. Oil temperature gauge (torque converter)
8. Ammeter
12. Dust indicator

Switches
9. Starting
10. Preheater
11. Headlight

Control levers
13. Gearshift
14. Compression release
15. Steering clutch (left)
16. Steering clutch (right)
20. Blade
21. Ripper
22. Safety lock for blade and ripper levers
23. Pin-puller
24. Fuel control

Control pedals
17. Brake (left)
18. Brake (right)
19. Decelerator



HYDRAULIC SYSTEM

Hydraulic control unit

All spool-type control valves housed in hydraulic tank. Gear-type hydraulic pump with capacity (discharge flow) of 396 ltr (104.6 U.S. Gal)/min.

Relief valve setting . . . . . 140 kg/cm² (2,000 PSI)

Control valves

- One control valve for angledozer, straightdozer and cushion-dozer
  Positions: Blade lift . . . . . Raise, hold, float and lower
- Two control valves for straight-tiltdozer and U-dozer
  Positions: Blade lift . . . . . Raise, hold, float and lower
  Blate tilt . . . . . Left, hold and right
- Additional control valve required for ripper
  Positions: Ripper lift . . . . . Raise, hold and lower

Hydraulic cylinders

Double-acting, piston type

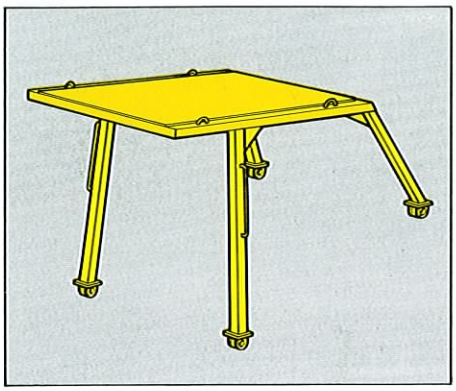
	Number of cylinders	Bore
Blade lift	2	160 mm (6.30")
Blade tilt	1	250 mm (9.84")
Ripper lift	2	225 mm (8.86")
Ripper tilt	2	225 mm (8.86")

DOZER EQUIPMENT

Use of high-tensile-strength steel in moldboard and unitized construction of the back plate for extended service. Blade tilt hose pipings are mounted inside the dozer frame and protected from damage.

	Overall length with dozer	Blade length x height	Max. lift above ground	Max. drop below ground	Max. tilt adjustment	Additional weight		Additional ground pressure
						Dozer equipment	Hydraulic control unit	
Straight-tiltdozer	7120 mm (23'4")	4315 mm x 1875 mm (14'2" x 6'2")	1545 mm (5'1")	700 mm (2'4")	1000 mm (3'3")	7830 kg (17,260 lb)	880 kg (1,940 lb)	0.21 kg/cm² (2.99 PSI/20.6 kPa)
Straightdozer	7120 mm (23'4")	4315 mm x 1875 mm (14'2" x 6'2")	1545 mm (5'1")	700 mm (2'4")	1000 mm (3'3")	7510 kg (16,560 lb)	870 kg (1,920 lb)	0.20 kg/cm² (2.84 PSI/19.6 kPa)
Angledozer	7215 mm (23'8")	5230 mm x 1350 mm (17'2" x 4'5")	1640 mm (5'5")	720 mm (2'4")	550 mm (1'10")	7200 kg (15,870 lb)	870 kg (1,920 lb)	0.20 kg/cm² (2.84 PSI/19.6 kPa)
U-dozer	7600 mm (24'11")	4715 mm x 1875 mm (15'6" x 6'2")	1545 mm (5'1")	700 mm (2'4")	1000 mm (3'3")	8830 kg (19,470 lb)	880 kg (1,940 lb)	0.24 kg/cm² (3.41 PSI/23.5 kPa)
Cushion dozer	7050 mm (23'2")	3365 mm x 1330 mm (11' x 4'4")	915 mm (3')	1240 mm (4'1")	–	6260 kg (13,800 lb)	870 kg (1,920 lb)	0.17 kg/cm² (2.41 PSI/16.7 kPa)

ATTACHMENTS



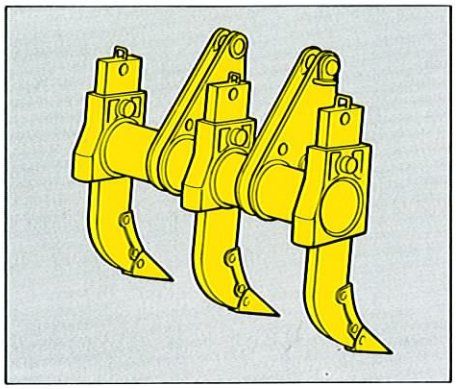
ROPS CANOPY

Meets ISO 3471, SAE J1040a and SAE J395a ROPS standards, as well as ISO 3449 FOPS standard.

Additional weight . . . . 1620 kg (3,570 lb)

- ROPS cab also available

Additional weight . . . . 2450 kg (5,400 lb)



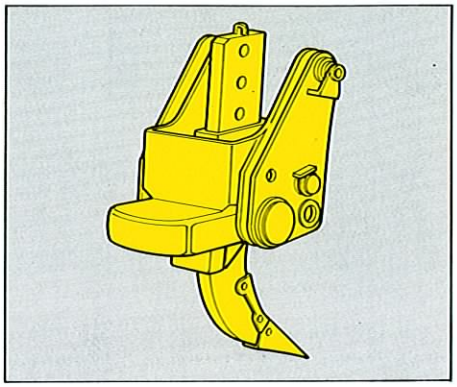
MULTI-SHANK RIPPERS

Rigid type: Hydraulically controlled parallelogram-type ripper with 3 shanks. Digging angle fixed at 45°.

Additional weight (including hydraulic control unit) . . . . . 6445 kg (14,210 lb)
Beam length . . . . . 2854 mm (9'4")
Max. lift above ground . . . . . 850 mm (2'9")
Max. digging depth . . . . . 1020 mm (3'4")

Variable type: Hydraulically controlled parallelogram-type ripper with 3 shanks. Digging angle adjustable from 36°50' to 61°20'.

Additional weight (including hydraulic control unit) . . . . . 6880 kg (15,170 lb)
Beam length . . . . . 2854 mm (9'4")
Max. lift above ground . . . . . 850 mm (2'9")
Max. digging depth . . . . . 1020 mm (3'4")



VARIABLE GIANT RIPPER

Variable, parallelogram-type single-shank ripper ideal for digging up hard rocks. Digging angle with stepless adjustability from 37°10' to 61°20'.

Additional weight (including hydraulic control unit) . . . . . 5440 kg (11,990 lb)
Beam width . . . . . 1226 mm (4')
Max. lift above ground . . . . . 1130 mm (3'8")
Max. digging depth . . . . . 1400 mm (4'7")

SHOES

	Additional weight	Ground contact area	Additional ground pressure
710 mm (28.0") extreme service shoes	600 kg (1,330 lb)	47710 cm^2 (7,395 sq.in)	−0.117 kg/cm^2 (1.664 PSI/11.5 kPa)

Materials and specifications are subject to change without notice.

KOMATSU LTD. Tokyo, Japan

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