



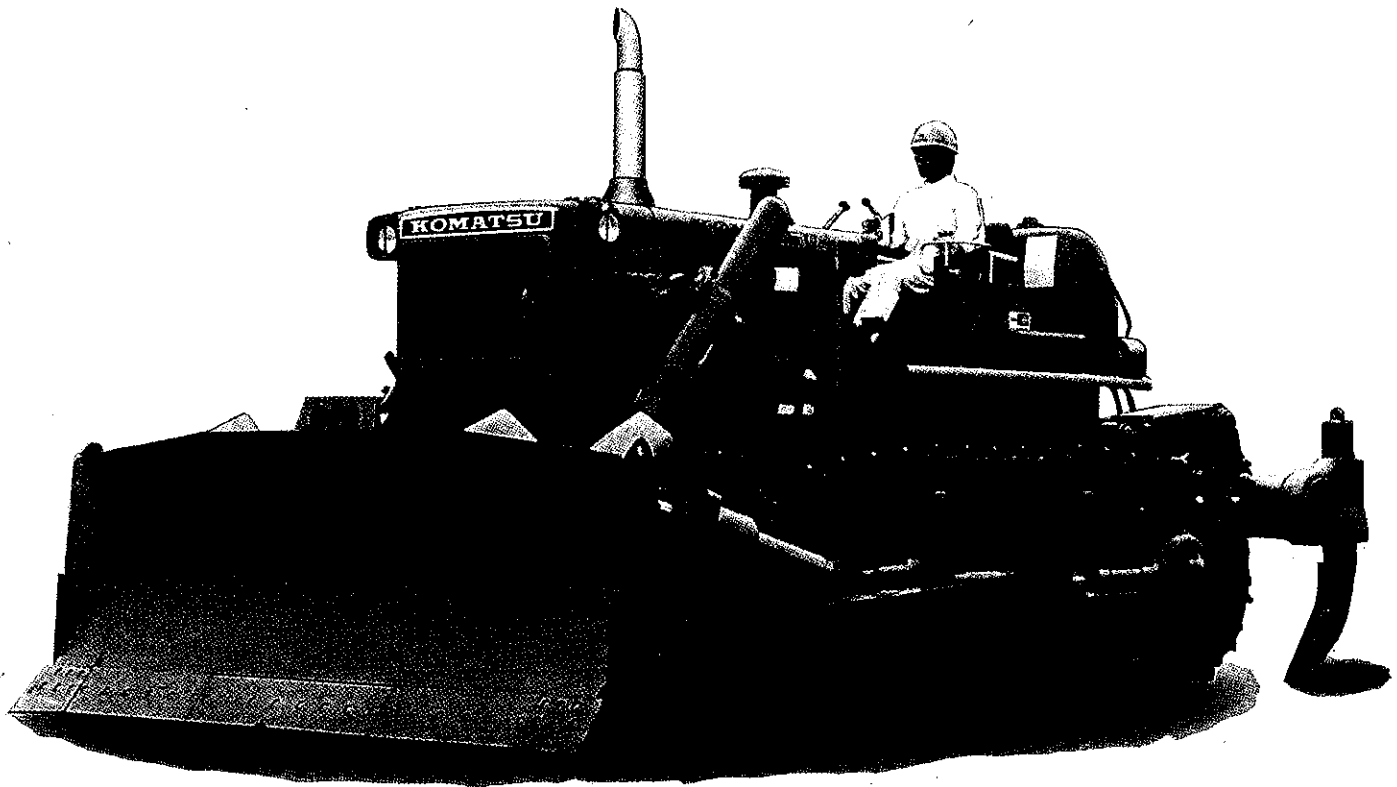
KOMATSU
Shaping the world of tomorrow

D85A-12

STRAIGHT-TILT DOZER

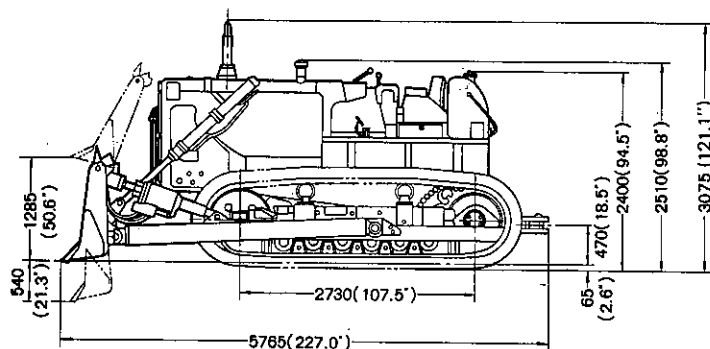
TORQFLOW

FLYWHEEL HORSEPOWER: 200 HP/1850 RPM
TRACTOR OPERATING WEIGHT: 18110 kg (39,930 lb)
OPERATING WEIGHT: 22300 kg (48,700 lb)



(Segment type sprockets are standard.)

- Direct-injection CUMMINS diesel engine for ample reserve power and fuel economy.
- KOMATSU TORQFLOW-smooth and responsive power shift with single-lever control for instant speed and direction changes.
- Hydraulically actuated, wet-type steering clutches and brakes for years of dependable service.
- Hydraulically controlled blade of high-tensile strength steel for superior durability.
- Sturdy mono-bloc construction main frame for strong resistance against twisting strains and impacts. Yet servicing power train components are convenient.
- Floating seals in track and carrier rollers and idlers keep dirt out and lubricant in for reduced maintenance cost, as well as extended undercarriage life.
- Unique KOMATSU dust seals between track links and pins prevent abrasive dirt or mud from entering pin-to-bushing clearances and lengthening link pitch for longer track service.



TRACTOR

ENGINE:

Model	CUMMINS NTO-6
Type	Water-cooled, 4-cycle, overhead valve, direct-injection, diesel
No. of cylinders—bore x stroke	6—5.125" x 6.00" (130.2 mm x 152.4 mm)
Piston displacement	743 cu.in (12170 cc)
Performance:	
Flywheel horsepower	200 HP/1850 RPM
Max. torque	.90 kg.m (651 ft.lb)/1100 RPM
Fuel consumption	180g (0.40 lb)/HP.h
Fuel system:	
Fuel oil	Diesel gas oil, ASTM specification D975-60T, No. 2D
Governor	Mechanical, all-speed control
Lubrication system:	
Lubricating method	Gear pump, forced lubrication
Filter	Full-flow and by-pass
Oil cooler	Water-cooled
Cooling system	Forced circulation by centrifugal pump, pusher-type fan
Air cleaner	Dry type with pre-cleaner
Starting method	Electric starting motor
Starting motor	24V, 7.4 KW
Generator	24V, 12A
Battery	24V (12V x 2)—200Ah

PERFORMANCE:

Travel speed and rated drawbar pull (see chart):

Travel speed:	
Forward 1st	.0 ~ 3.3 km/h (0 ~ 2.1 MPH)
2nd	.0 ~ 6.1 km/h (0 ~ 3.8 MPH)
3rd	.0 ~ 10.7 km/h (0 ~ 6.6 MPH)
Reverse 1st	.0 ~ 4.0 km/h (0 ~ 2.5 MPH)
2nd	.0 ~ 7.1 km/h (0 ~ 4.4 MPH)
3rd	.0 ~ 12.0 km/h (0 ~ 7.5 MPH)
Gradeability	30°

POWER TRANSMITTING SYSTEM:

Torque converter:	
Type	3-element, single-stage and single-phase
Cooling method	Water-cooled
Transmission:	
Type	Planetary gear and multiple disc clutch, hydraulically actuated, forced lubrication
Gear shift	3 forward and 3 reverse speeds
Bevel gear	Spiral bevel gear, single reduction
Steering system:	
Steering clutch	Wet, multiple disc, spring, hand-operated, hydraulically actuated
Steering brake	Wet, contracting band, foot-operated
Final drive	Spur gear, double reduction

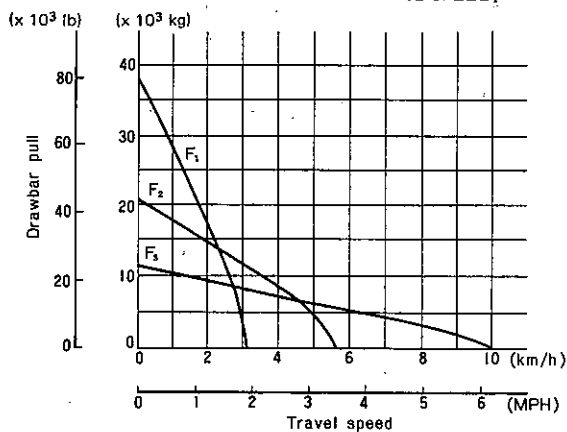
UNDERCARRIAGE:

Suspension	Oscillation type, equalizer bar
No. of carrier rollers	2 (each side)
No. of track rollers	6 (each side)
Shoe:	
Type	Assembled, single grouser
Grouser height	65 mm (2.6")
No. of shoes	38 (each side)
Pitch	216 mm (8.5")
Width	560 mm (22.0")

DIMENSIONS:

Overall length	4595 mm (180.9")
Overall width	2600 mm (102.4")
Overall height	3075 mm (121.1")
Track gauge	2000 mm (78.7")

DRAWBAR PULL VS TRAVEL SPEED



Length of track on ground	2730 mm (107.5")
Ground contact area	30580 cm ² (4740 sq.in)
Ground pressure	0.59 kg/cm ² (8.39 PSI)
Ground clearance	400 mm (15.7")

DRAWBAR (Optional):

Type	Pin, fixed
Height of drawbar above ground	470 mm (18.5")

POWER TAKE-OFF:

Location	Center, rear face of bevel gear case
Shaft RPM	1850 RPM
Rotational direction	Clockwise (as viewed from drive side)

CAPACITY:

Cooling water	65 ltr (17 U.S. Gal)
Fuel tank	420 ltr (111 U.S. Gal)
Engine	43 ltr (11 U.S. Gal)
Bevel gear case	
Torque converter	
Transmission	130 ltr (34 U.S. Gal)
Steering case	
Final drive case (each side)	36 ltr (9.5 U.S. Gal)
Recoil spring case (each side)	10 ltr (2.6 U.S. Gal)
Undercarriage (rollers, each side)	3 ltr (0.8 U.S. Gal)

OPERATING WEIGHT

STRAIGHT-TILTDOZER EQUIPMENT

DIMENSIONS:

Overall length	5765 mm (227.0")
Overall width	3620 mm (142.5")
Overall height	3235 mm (127.4")
Ground pressure	0.72 kg/cm ² (10.24 PSI)

DOZER EQUIPMENT:

Type	Straight, hydraulic tilting
Weight	3680 kg (8,110 lb), including cylinders and cylinder supports
Blade:	
Length	3620 mm (142.5")
Height	1280 mm (50.4")
Digging angle	52°
Max. lift above ground	1285 mm (50.6")
Max. drop below ground	540 mm (21.3")
Max. tilt adjustment	735 mm (28.9")

HYDRAULIC CYLINDER:

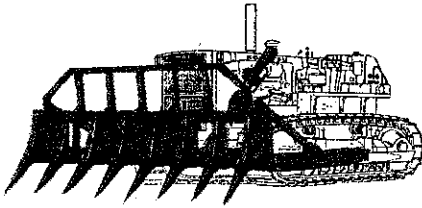
Type	Double acting, piston
No. of cylinders—bore:	
Lift cylinder	2—120 mm (4.72")
Tilt cylinder	1—200 mm (7.87")

HYDRAULIC CONTROL UNIT:

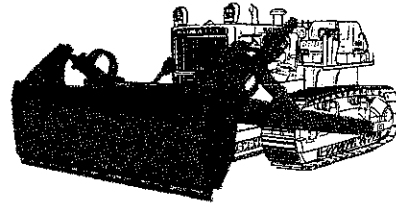
Weight	510 kg (1,120 lb)
Max. oil pressure	140 kg/cm ² (2,000 PSI)
Hydraulic pump	
Type	Gear pump
Capacity (discharge flow)	.269 ltr (71 U.S. Gal)/min at engine 1850 RPM
Location	Right side of flywheel housing
Control valve:	
Type	Spool type
Position:	
Lifting	Raise, hold, lower and float
Tilting	Left, hold and right
Hydraulic tank:	
Type	Equipped with built-in control valve
Location	To top of right fender
Filter	Full-flow type
Hydraulic oil capacity	110 ltr (29 U.S. Gal)

OPERATING WEIGHT

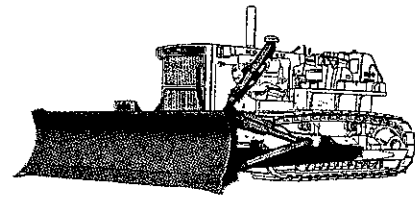
(Dimensions and operating weight include drawbar.)



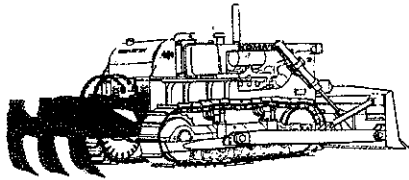
Straight-Rakedozer



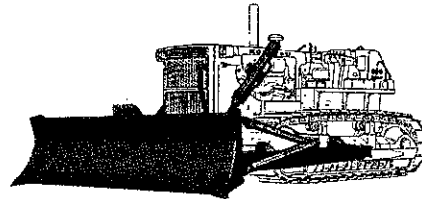
Trimmingdozer



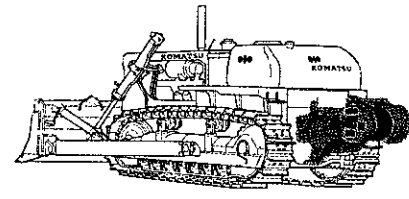
Mechanical angle power tiltadozer



Multi-shank Ripper



Angledozer



Towing winch

■ STRAIGHTDOZER

DOZER EQUIPMENT:

Type	Straight, manual tilting
Weight	3580 kg (7,890 lb), including cylinders and cylinder supports
Blade:	
Length	3620 mm (142.5")
Height	1280 mm (50.4")
Digging angle	52°
Max. lift above ground	1285 mm (50.6")
Max. drop below ground	540 mm (21.3")
Max. tilt adjustment	735 mm (28.9")

HYDRAULIC CYLINDER:

Type	Double acting, piston
No. of cylinders—bore	2—120 mm (4.7")

HYDRAULIC CONTROL UNIT:

Weight	410 kg (900 lb)
Max. oil pressure	140 kg/cm ² (2,000 PSI)
Hydraulic pump:	
Type	Gear pump
Capacity (discharge flow)	.264 ltr (70 U.S.Gal)/min at engine 1850 RPM
Location	Rear of flywheel housing

Control valve:

Type	Spool type
Position	Raise, hold, lower and float

Hydraulic tank:

Type	Equipped with built-in control valve
Location	Right side of operator's seat

Filter	Full-flow type
Hydraulic oil capacity	105 ltr (28 U.S. Gal)

■ STRAIGHT-RAKEDOZER

DOZER EQUIPMENT:

Type	Straight, manual tilting
Rake:	
Type	Brace type
Weight	3590 kg (7,910 lb)
Length	3560 mm (140.1")
Height	1740 mm (68.7")
No. of teeth	9
Teeth spacing	400 mm (15.7")
Tooth length	400 mm (15.7")
Max. lift above ground	1100 mm (43.3")
Max. drop below ground	800 mm (31.4")

■ ANGLE-RAKEDOZER

DOZER EQUIPMENT:

Type	Manual angling and tilting
Rake:	
Type	Brace type
Weight	3210 kg (7,080 lb)
Length	3365 mm (144.3")
Height	1760 mm (69.3")
No. of teeth	9
Teeth spacing	413 mm (16.3")
Tooth length	400 mm (15.7")
Max. lift above ground	1350 mm (53.1")
Max. drop below ground	610 mm (24.0")

■ MULTI-SHANK RIPPER

RIPPER EQUIPMENT:

Type	Parallelogram
Weight	2940 kg (6,480 lb)
Digging width	2000 mm (78.7")
Max. lift above ground	575 mm (22.6")
Max. digging depth	650 mm (25.6")
Beam length	2164 mm (85.2")

Shank:

No. of shanks	3
Tooth point	Replaceable
Pitch (2 shanks)	2000 mm (78.7")
Pitch (3 shanks)	1000 mm (39.4")
Digging angle	45°

HYDRAULIC CYLINDER:

Type	Double acting, piston
No. of cylinders—bore	2—150 mm (5.9")

HYDRAULIC CONTROL UNIT:

Type	Gear pump, forced circulation
Weight	70 kg (150 lb)
Max. oil pressure	140 kg/cm ² (2,000 PSI)
Capacity (discharge flow)	.264 ltr (70 U.S. Gal)/min at engine 1850 RPM

Control valve:

Type	Spool type
Position	Raise, hold and lower

Hydraulic oil capacity	17 ltr (4.5 U.S. Gal)
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■ ANGELEDOZER

DOZER EQUIPMENT:

Type	Manual angling and tilting
Weight	3540 kg (7,800 lb) including cylinders and cylinder supports

Blade:

Type	Brace type
Length x height	4260 mm x 1060 mm (167.7" x 41.7")

Digging angle	55°
Max. lift above ground	1260 mm (49.6")
Max. drop below ground	530 mm (20.9")
Max. tilt adjustment	500 mm (19.7")
Blade angle	25°

HYDRAULIC CONTROL UNIT:

Weight	410 kg (900 lb)
Max. oil pressure	140 kg/cm ² (2,000 PSI)
Hydraulic pump:	

Type	Gear pump
Capacity (discharge flow)	.264 ltr (70 U.S. Gal)/min at engine 1850 RPM

Location	Top of flywheel housing
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Control valve:

Type	Spool type
Position	Raise, hold, lower and float

Hydraulic oil tank:

Type	Equipped with built-in control valve
Location	Top of right fender

Filter	Full-flow type
Hydraulic oil capacity	105 ltr (28 U.S. Gal)

■ MECHANICAL ANGLE POWER TILTDOZER

DOZER EQUIPMENT:

Type Angling, hydraulic tilting
Weight 3840 kg (8,480 lb), including cylinders and cylinder supports

Blade:

Type Brace type
Length 4260 mm (167.7")
Height 1060 mm (41.7")
Digging angle 55°
Max. lift above ground 1275 mm (50.2")
Max. drop below ground 540 mm (21.3")
Max. tilting adjustment 450 mm (17.7")
Blade angle 25°

HYDRAULIC CYLINDER:

Type Double acting, piston
No. of cylinders—bore:
Blade cylinder 2—120 mm (4.7")
Tilt cylinder 2—160 mm (6.3")

HYDRAULIC CONTROL UNIT:

Weight 560 kg (1,230 lb)
Max. oil pressure 140 kg/cm² (2,000 PSI)
Hydraulic pump:

Type Gear pump
Capacity (discharge flow) 264 ltr (70 U.S. Gal)/min at engine 1850 RPM

Location Rear of flywheel housing

Control valve:

Type Spool type
Position:

Blade cylinder Raise, hold, lower and float
Tilt cylinder Right, hold and left

Hydraulic oil tank:

Type Equipped with built-in control valve

Location Right side of operator's seat

Filter Full-flow type

Hydraulic oil capacity 105 ltr (27.7 U.S. Gal)

■ TRIMMINGDOZER

DOZER EQUIPMENT:

Type Trimmingdozer, hydraulically controlled
Weight 4080 kg (8,990 lb), including cylinders and cylinder supports

Blade:

Length 3416 mm (134.5")
Height 1120 mm (44.1")
Max. lift above ground 1360 mm (53.5")
Max. drop below ground 615 mm (24.2")
Max. pitch adjustment
Forward 23.5°
Backward 27.5°

HYDRAULIC CYLINDER:

Type Double acting, piston
No. of cylinders—bore:
Lift cylinder 2—120 mm (4.7")
Pitch cylinder 2—150 mm (5.9")

HYDRAULIC CONTROL UNIT:

Weight 1020 kg (2,250 lb)
Max. oil pressure 140 kg/cm² (2,000 PSI)
Hydraulic pump:

Type Gear pump
Capacity (discharge flow) 264 ltr (70 U.S. Gal)/min at engine 1850 RPM

Location Rear of flywheel housing

Control valve:

Type Spool type
Position:

Lifting Raise, hold, lower and float
Pitching Forward, hold and reverse

Hydraulic tank:

Type Equipped with built-in control valve

Location Right side of operator's seat

Filter Full-flow type

Hydraulic oil capacity 110 ltr (29 U.S. Gal)

■ COALDOZER

DOZER EQUIPMENT:

Type Straight dozer, hydraulically controlled
Weight 3740 kg (8,250 lb)

Blade:

Capacity 13 m³ (17.0 cu.yd)
Length 4685 mm (184.4")
Height 1560 mm (61.4")
Digging angle 55°
Blade wing angle 25°
Max. lift above ground 1175 mm (46.3") at blade center
Max. drop below ground 500 mm (21.7")

HYDRAULIC CYLINDER:

Type Double acting, piston
No. of cylinders—bore 2—120 mm (4.7")

HYDRAULIC CONTROL UNIT:

Weight 410 kg (900 lb)
Max. oil pressure 140 kg/cm² (2,000 PSI)
Hydraulic pump Gear pump
Control valve:

Type Spool type
Position Raise, hold, lower and float

Hydraulic tank Equipped with built-in control valve

Hydraulic oil capacity 105 ltr (28 U.S. Gal)

■ TOWING WINCH

TOWING WINCH:

Type Power-controlled, gear drive, single drum, reversible

Weight 1850 kg (4,080 lb)

Length 1010 mm (39.8")

Width 1365 mm (53.7")

Height 1095 mm (43.1")

Drum dimensions:

Drum diameter 330 mm (13.0")

Flange diameter 600 mm (23.6")

Drum width 300 mm (11.8")

Gradeability 30°

Inserted cable:

Cable dia. x length 22.4 mm x 65 m (0.9" x 213 ft)

Reduction ratio:

Forward 82.1 : 1

Reverse 31.2 : 1

Clutch Wet multiple disc clutch, hydraulically controlled, adjustment free

Transmission Spur gear and wet multiple disc clutch, hydraulically actuated, forward and reverse rotation

Brake Dry, contracting band, hydraulically actuated

Drawbar Fixed type

Height of drawbar above ground 690 mm (27.2")

HYDRAULIC CONTROL UNIT:

Max. oil pressure 15.5 kg/cm² (220 PSI)

Hydraulic pump:

Type Gear pump

Capacity (discharge flow) 28 ltr (7.4 U.S. Gal)/min at engine 1000 RPM

Location Rear of engine

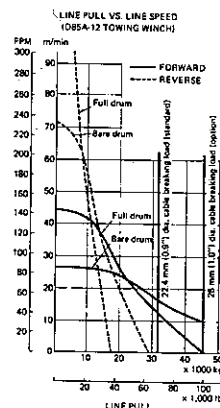
Control valve:

Type 2-spool type

Position Forward, neutral and reverse

Filter Full-flow type

Hydraulic oil capacity 92 ltr (24 U.S. Gal)



Specifications are subject to change without notice.

In addition to the attachments shown on this sheet, U-dozer, snow plow, pusher plate, rear power control unit, steel cab, canopy, cab guard, etc. are also available.

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