



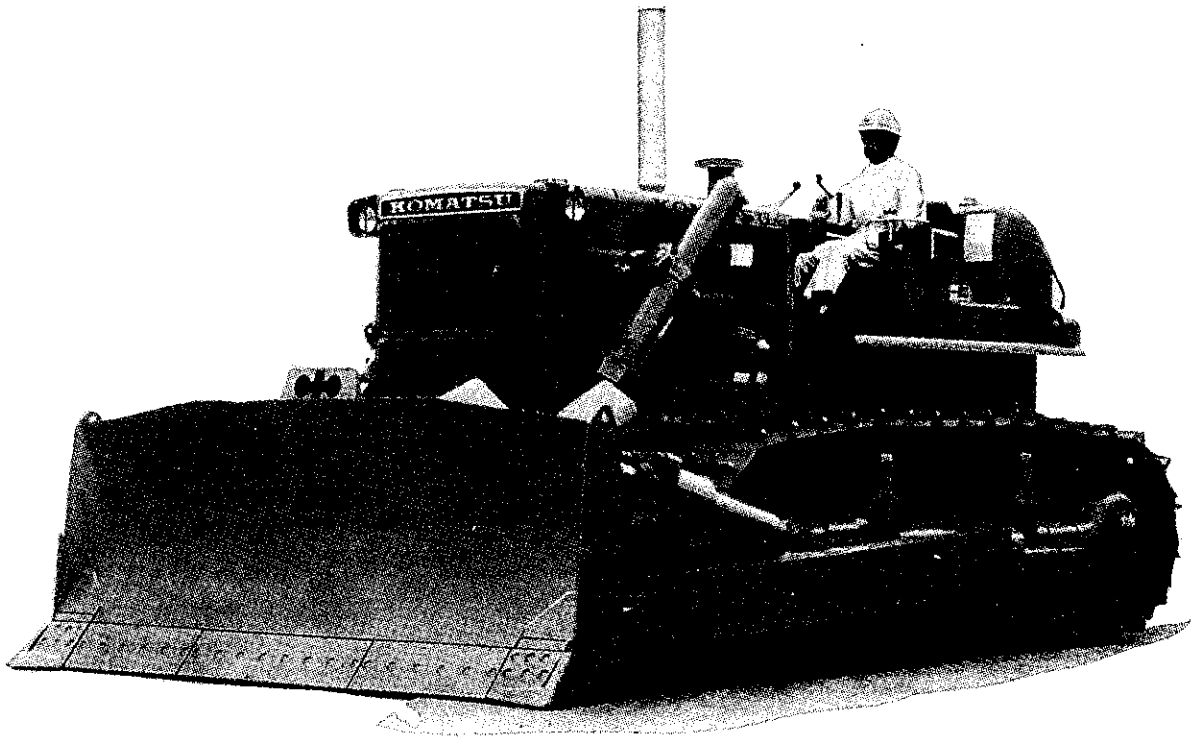
KOMATSU
Shaping the world of tomorrow

D85E-12

BULLDOZER

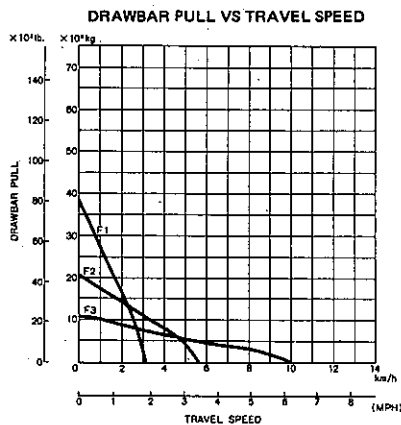
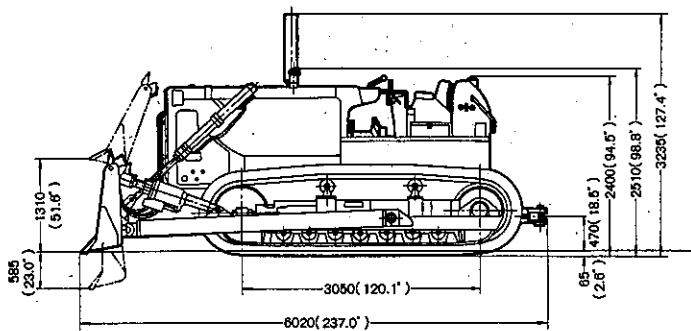
TORQFLOW

FLYWHEEL HORSEPOWER: 180 HP/1850 RPM
TRACTOR OPERATING WEIGHT: 18700 kg (41,230 lb)
OPERATING WEIGHT: 23000 kg (50,710 lb)



- Direct-injection type CUMMINS diesel engine for sustained power and fuel economy.
- KOMATSU TORQFLOW—smooth and responsive power shift for instant speed and directional changes.
- Longer tracks and low ground pressure for rough or logging operations.
- Wet-type steering clutches hydraulically operated for extended no-maintenance interval.
- Sturdy box-type main frame to resist shocks and twisting stress.
- 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.
- ATTACHMENTS:
 - Angledozer ● Straightdozer ● Straight-tiltdozer ● Rakedozer ● Multi-shank ripper
 - Towing winch ● Snow plow ● Coal dozer ● U-dozer ● Pusher plate
 - Rear power control unit ● Steel cab ● Canopy ● Cab guard ● Swing drawbar, etc.

D85E-12 SPECIFICATIONS



■ TRACTOR

ENGINE:

Model	CUMMINS NH-220-CI
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	180 HP/1850 RPM
Max. torque	80 kg.m (579 lb.ft)/1100 RPM
Fuel consumption ratio	185 g (0.41 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 type
Oil cooler	Water-cooled
Cooling system	Forced circulation by centrifugal water pump, pusher type fan
Air cleaner	Dry type with pre-cleaner
Starting method	Electric starting motor
Starting motor	24 V, 7.4 KW
Generator	24 V, 12 A
Battery	24 V (12 V x 2)—200 Ah

PERFORMANCE:

Travel speed and rated drawbar pull (see chart):			
Forward	1st	0—3.1 km/h (0—1.9 MPH)	
	2nd	0—5.6 km/h (0—3.5 MPH)	
	3rd	0—10.0 km/h (0—6.2 MPH)	
Reverse	1st	0—3.7 km/h (0—2.3 MPH)	
	2nd	0—6.8 km/h (0—4.2 MPH)	
	3rd	0—12.0 km/h (0—7.5 MPH)	
Gradeability			30°

POWER TRANSMITTING SYSTEM:

Torque converter:	
Type	3-element, single-stage, single-phase
Cooling method	Water-cooled
Transmission:	
Type	Planetary gear, multiple disc clutch hydraulically actuated
Gear shift	4 forward, 2 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 rollers:	
Carrier roller	2 (each side)
Track roller	7 (each side)
Shoe:	
Type	Assembled, single grouser
Grouser height	65 mm (2.6")
No. of shoes	41 (each side)
Pitch	216 mm (8.5")
Width	560 mm (22.0")
	Optional: 610 mm (24.0")
	660 mm (26.0")
	710 mm (28.0")

DIMENSIONS:

Overall length	4595 mm (180.9")
Overall width	2600 mm (102.4")
Overall height	3235 mm (127.4")
Track gauge	2000 mm (78.7")

Length of track on ground	3050 mm (120.1")
Ground contact area	34160 cm ² (5290 sq.in)
Ground pressure	0.55 kg/cm ² (7.82 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 revolutions	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)
Torque converter	
Transmission	
Bevel gear case	
Steering case	130 ltr (34 U.S. Gal)
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

18700 kg (41,230 lb)
(Dimensions and operating weight include drawbar.)

■ STRAIGHT-TILTDOZER EQUIPMENT

DIMENSIONS:

Overall length	6020 mm (237.0")
Overall width	3620 mm (142.5")
Overall height	3235 mm (127.4")
Ground pressure	0.67 kg/cm ² (9.53 PSI)

DOZER EQUIPMENT:

Type	Straight, hydraulic tilting
Weight	3790 kg (8,360 lb) including cylinder support 170 kg (375 lb)

Blade:

Length x height	3620 mm x 1280 mm (142.5" x 50.4")
Digging angle	52°
Max. lift above ground	1310 mm (51.6")
Max. drop below ground	585 mm (23.0")
Max. tilting 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—225 mm (8.86")

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	Rear of engine
Control valve:	
Type	Spool type
Position:	
Lifting	Raise, hold, lower, hold
Tilting	Left, hold, right
Hydraulic oil tank:	
Type	Equipped with built-in control valve
Location	Right side of fender top
Filter	Full-flow type
Hydraulic oil	110 ltr (29 U.S. Gal)

OPERATING WEIGHT

23000 kg (50,710 lb)

Specifications are subject to change without notice.

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