

EX700 EXCAVATORS service MANUAL

LOADER FRONT ATTACHMENT

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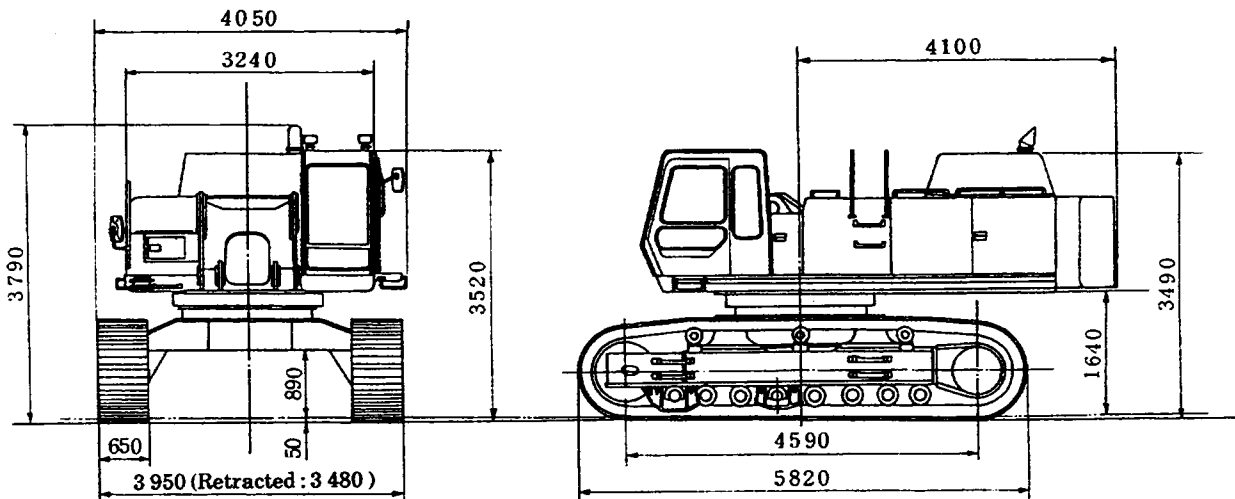


SPECIFICATIONS / General Information

SPECIFICATIONS

Loader Attachment	Bottom Dump Type		Tilt Dump Type	
Bucket Capacity m ³ (cu yd)	4.0 (5.23)	3.6 (4.71)	4.4 (5.75)	4.0 (5.23)
Operating Weight kg (lb)	70 000 (154 000)	70 500 (155 000)		
Ground Pressure bar (kgf/cm ² , PSi)	1.07 (1.07, 15.2)	1.08 (1.08, 15.4)		

Engine	Cummins NTA 855-C450	
Rated Engine Output kW/min ⁻¹ (PS/rpm)	309/1 800 (420/1 800)	
Pumps	Variable Displacement, Piston Type × 2 Gear Type × 1	
Main Relief Pressure bar (kgf/cm ² , PSi)	300 (300, 4 270) [340 (340, 4 830) at traveling]	
Hydraulic Swing motor	Fixed Displacement, Piston Type × 2	
Hydraulic Travel motor	Fixed Displacement, Piston Type × 2	
Parking Brake	Mechanical Brake	
Overall Width mm (ft in)	4 050	(13'03")
Overall Height mm (ft in)	3 790	(12'05")
Undercarriage Length mm (ft in)	5 820	(19'01")
Sprocket Center to Idler Center mm (ft in)	4 590	(15'01")
Undercarriage Width mm (ft in)	3 950	(12'12")
Track Gauge mm (ft in)	3 300	(10'10")
Track Shoe Width mm (ft in)	650	(2'02")
Rear End Swing Radius mm (ft in)	4 100	(13'05")
Ground Clearance of Upperstructure mm (ft in)	1 640	(5'05")
Minimum Ground Clearance mm (ft in)	890	(2'11")
Swing Speed min ⁻¹ (rpm)	9.3	
Travel Speed (fast/slow) km/h (mph)	4.6/3.3	(2.9/2.1)
Gradeability (%)	70	
Fuel Tank Capacity ℓ (cu in)	800	(48 800)
Hydraulic Oil Tank Capacity ℓ (cu in)	340	(20 700)



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SPECIFICATIONS / General Information

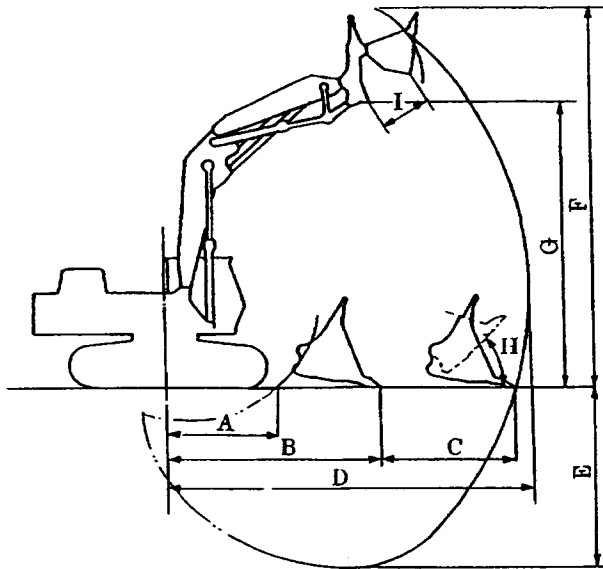
BUCKET TYPES AND APPLICATIONS

Category Bucket	Bucket Capacity m ³ (cu yd)		Bucket Width mm (cu yd)	Weight kg (lb)	Applications
	Heaped	Strucked			
	4.0 (5.23)	3.6 (4.71)	2 340 (7'08")	5 620 (12 400)	For General purpose
	3.6 (4.71)	3.3 (4.32)	2 180 (7'02")	6 080 (13 400)	For Poorly Blasted rocks
	4.4 (5.75)				For General purpose
	4.0 (5.23)				For Poorly Blasted rocks

* General purpose: For digging and loading operation of sand, gravels, clay, ordinary earth, and for loading operation of well blasted rocks.

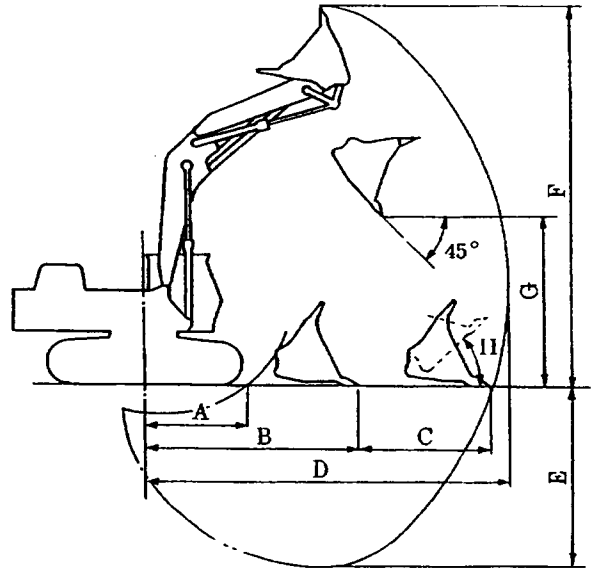
SPECIFICATIONS / General Information

WORKING RANGES



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Bottom Dump Type



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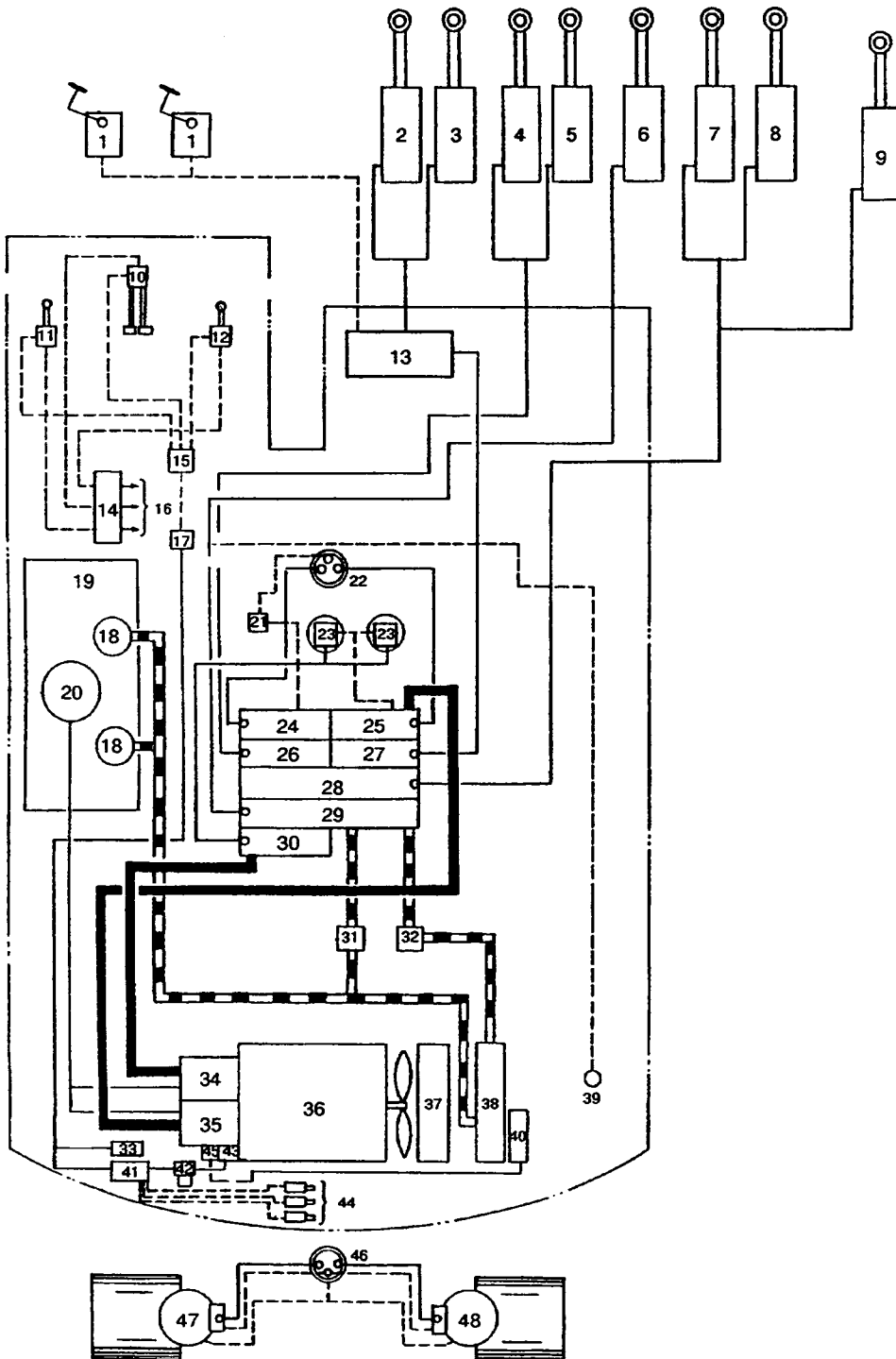
Tilt Dump Type

Category	Bottom DumpType	Tilt DumpType
Item		
A : Minimum Digging Distance mm (ft in)	3 290 (10'10")	3 090 (10'02")
B : Minimum Level Crowding Distance mm (ft in)	5 730 (18'10")	5 730 (18'10")
C : Level Crowding Distance mm (ft in)	3 800 (12'06")	3 800 (12'06")
D : Maximum Digging Reach mm (ft in)	10 000 (32'10")	10 000 (32'10")
E : Maximum Digging Depth mm (ft in)	5 040 (16'06")	5 040 (16'06")
F : Maximum Cutting Height mm (ft in)	10 840 (35'07")	10 840 (35'07")
G : Maximum Dumping Height mm (ft in)	7 910 (25'11")	4 570 (14'12")
H : Maximum Bucket Rollback Angle (on ground) (°)	58	52
I : Maximum Bucket Opening Width mm (ft in)	1 600 (5'03")	—

HYDRAULIC SYSTEM/ HYDRAULIC CIRCUIT

HYDRAULIC CIRCUIT

Bottom Dump Type



- 1 Bucket dump pilot valve
- 2 Dump cylinder
- 3 Dump cylinder
- 4 Bucket cylinder
- 5 Bucket cylinder
- 6 Arm cylinder
- 7 Boom cylinder
- 8 Boom cylinder
- 9 Level cylinder
- 10 Travel pilot valve
- 11 Left travel pilot valve
- 12 Right travel pilot valve
- 13 Bucket open/close valve
- 14 Shockless valve
- 15 Lock valve
- 16 To control valve
- 17 Check valve
- 18 Full flow filter
- 19 Hydraulic oil tank
- 20 Suction filter
- 21 SOL valve
- 22 Center Joint
- 23 Swing motor
- 24 Travel (L)
- 25 Travel (R)
- 26 Bucket
- 27 Dump
- 28 Boom
- 29 Arm
- 30 Swing
- 31 Bypass check valve
- 32 Check valve
- 33 EHC valve
- 34 Front pump
- 35 Rear pump
- 36 Engine
- 37 Radiator
- 38 Oil cooler
- 39 Accumulator
- 40 Transmission cooler
- 41 Solenoid valve
- 42 Pilot filter
- 43 Pilot pump
- 44 Mode select cylinder
- 45 Transmission cooler pump
- 46 Center joint
- 47 Travel motor
- 48 Travel motor

- Supply line (high pressure)
- Return line (low pressure)
- Circuit line
- Drain and pilot line

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