

EX700

SERVICEMAN

HANDBOOK

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CONTENTS

SPECIFICATIONS	1
MAIN PUMP	1
PILOT PUMP	1
CONTROL VALVE	1
SWING MOTOR	2
TRAVEL MOTOR	2
PILOT VALVE	2
BOOM CYLINDER	3
ARM CYLINDER	3
BUCKET CYLINDER	3
TIGHTENING TORQUE	3
SERVICE REFILL CAPACITIES	4
PERFORMANCE DATA	5
ENGINE	7
SPECIFICATIONS	7
SERVICE DATA	9
WEAR CHECK	10
FRONT ATTACHMENT	10
PIN & BUSHING	10
POINT & SIDE CUTTER	10
TRACK LINK	11
FRONT IDLER	12
UPPER ROLLER	12
LOWER ROLLER	12
ELECTRICAL SYSTEM	13
TEST DATA	13
BATTERY CIRCUIT	13
START-AID CIRCUIT	13
STARTING CIRCUIT	13
CHARGING CIRCUIT	13
ENGINE STOP CIRCUIT	14
ACCESSORY CIRCUIT	14
GAUGE PANEL	14
CONTROL CIRCUIT	14
FUSE	14
ELECTRIC CIRCUIT	15
HYDRAULIC CIRCUIT	19

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SPECIFICATIONS

1. MAIN PUMP

Model	NV270H-140
Type	Swash plate type variable displacement
Regulator	Operated by external pilot pressure
Volumetric displacement	264 cm ³ /rev (16.11 cu in /rev)
Nos. of pistons	9
Rated pressure	
Travel (High)	314 bar (320 kgf/cm ² , 4550 psi)
Front (Low)	294 bar (300 kgf/cm ² , 4266 psi)
Max flow rate	490 l/min (129.46 US gal/min, 108 Imp gal)
Reduction ratio	0.956
Rotation direction	Counter clockwise (view from driven shaft)
Weight	161 kg (354.9 lb)

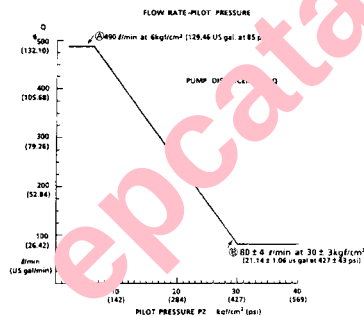
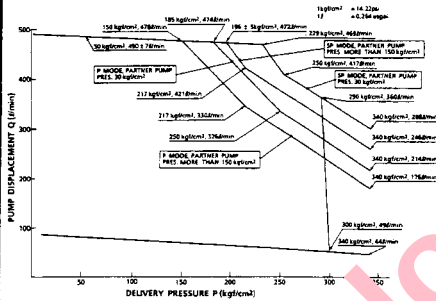
PERFORMANCE DATA

PQ Property

Test Condition:

Pump speed 1882 rpm (min⁻¹)

Engine speed 1800 rpm (min⁻¹)



2. PILOT PUMP

Model	KRP4-17-8CJ
Type	Gear pump
Volumetric displacement	16.8 cm ³ /rev (1.03 cu in/rev)
Max. flow rate	34.4 l (9.1 US gal, 7.61 Imp gal) at 2050 rpm (min ⁻¹)
Rated pressure	39.2 bar (40 kgf/cm ² , 569 psi)
Rotating direction	Clockwise (view from driven shaft)
Reduction ratio	1.0
Weight	6.0 kg (13.2 lb)

3. CONTROL VALVE

Model	KVMM-400-H
Type	Pilot operated, 9 spools, mono block type
Max. flow rate	More than 490 l/min (129.5 US gal/min, 107.8 Imp gal)

Relief valve set
pressure

Travel	333 ± 3 bar (340 ± 3 kgf/cm ² , 485 ± 43 psi) at 36 l/min (95.1 US gal/min, 79.2 Imp gal)
--------	--

Front

	294 ± 2 bar (300 ± 2 kgf/cm ²) (4266 ± 28 psi) at 140 l/min (37 US gal/min, 30.8 Imp gal)
--	---

Overload relief
valve Set pressure
Boom lower, arm
roll-in and bucket:

	314 ± 9.8 bar (320 ± 10 kgf/cm ² , 4550 ± 142 psi) at 110 l (29.1 US gal, 24.2 Imp gal)/min
--	--

Swing

	314 ± 9.8 bar (320 ± 10 kgf/cm ² , 4550 ± 142 psi) at 110 l (29.1 US gal, 24.2 Imp gal)/min
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Boom raise and
arm roll-out

	343 ± 9.8 bar (350 ± 10 kgf/cm ² , 4550 ± 142 psi) at 110 l (29.1 US gal, 24.2 Imp gal)/min
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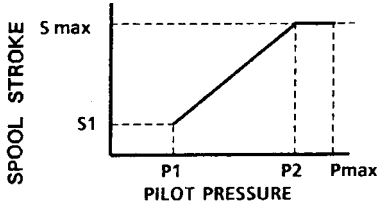
Weight

	350 kg (772 lb)
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SPECIFICATIONS

PILOT PRESSURE AND SPOOL STROKE

P1	S1	P2	Smax
7kg/cm ² (99.5 psi)	2 ± 0.5mm (0.08 ± 0.02 in)	27 ± 1kg/cm ² (384 ± 14 psi)	13mm (0.51 in)



4. SWING MOTOR

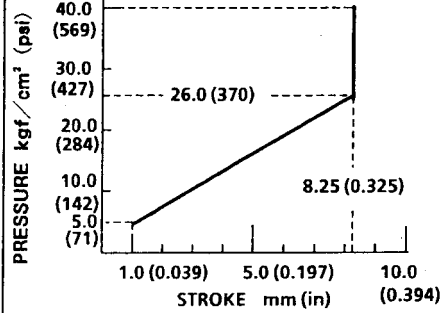
Model	MX200CAB11A-01-300
Type	Swash plate type axial piston motor
Displacement	201 cm ³ /rev (12.27 cu in/rev)
Rated pressure	255 bar (260 kgf/cm ² , 3700 psi)
Output torque	816 N·m (83.2 kgf·m, 601.5 lbf·ft)
Crossover relief valve	
Set pressure	294 ± 5 bar (300 ± 5 kgf/cm ² , 4266 ± 70 psi)
Makeup valve	
Cracking pressure	0.098-0.294 bar (0.1-0.3 kgf/cm ² , 1.4-4.3 psi)
Weight	111 kg (244.7 lb)

5. TRAVEL MOTOR

Model	MSF-340VP-CB
Type	Bent axis type, axial piston motor
Displacement	337.2 cm ³ /rev (20.58 cu in/rev) (Low speed) 228.6 cm ³ /rev (13.95 cu in/rev) (High speed)
Crossover relief valve	
Set pressure	314 ± 5 bar (320 ± 5 kgf/cm ² , 412 ± 5 psi)
Weight	130 kg (286 lb)

6. PILOT VALVE

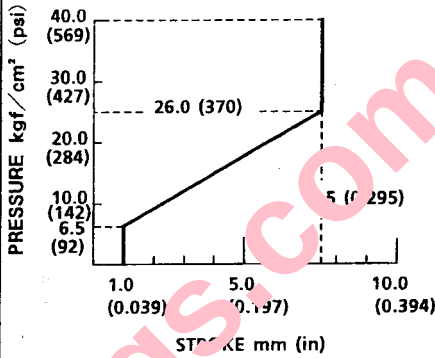
For travel	
Model	HVP03B
Primary Pressure	39 bar (40 kgf/cm ² , 569 psi)
Weight	18.7 kg (17.4 lb)



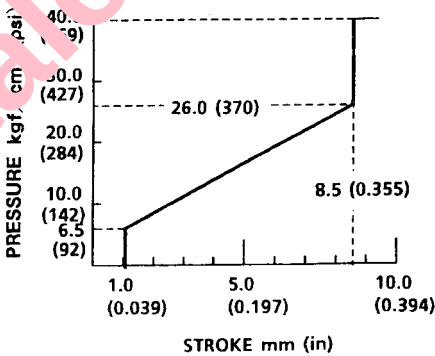
For other

Model	HVP03B
Primary Pressure	39 bar (40 kgf/cm ² , 569 psi)
Weight	5.76 kg (12.7 lb)

FOR BUCKET AND ARM



FOR BOOM AND SWING



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