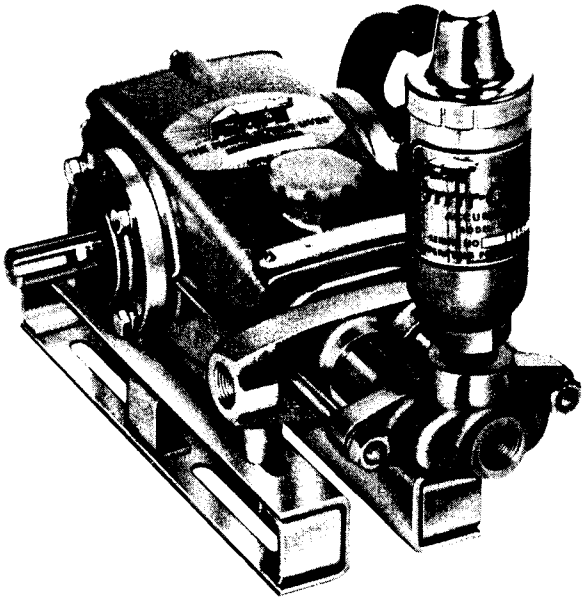


CAT PUMPS®

Piston Pump Model 260

HORSEPOWER REQUIREMENTS

Flow		PRESSURE PSI 300	PSI 500	PSI 600	Pump RPM
GPM	L/M	BAR —	BAR —	BAR —	
2.6	—	.50	1.00	1.10	1100
2.2	—	.50	.75	.83	925
1.5	—	.50	.50	.75	655

DETERMINING THE PUMP R.P.M. Rated G.P.M. / Rated R.P.M. = "Desired" G.P.M. / "Desired" R.P.M.

DETERMINING THE REQUIRED H.P. GPM x PSI / 1460 = Electric Brake H.P. Required

DETERMINING MOTOR PULLEY SIZE Motor Pulley O.D. / Pump R.P.M. = Pump Pulley O.D. / Motor R.P.M.

Note: Consult engine manufacturer when using gas or diesel engine

SPECIFICATIONS

	U.S. Measure
Volume	2.6 G.P.M.
Discharge Pressure	600 P.S.I.
Max. Inlet Pressure	– 8.5 to + 40 P.S.I.
RPM	1100 RPM
Crankcase Capacity	11 Oz.
Max. Fluid Temperature	160°F
Inlet Ports (1)	3/8" NPT
Discharge Ports	(1) 3/8" NPT and (1) 1/2" NPT
Pulley Mounting	Either side
Shaft Diameter	.650"
Weight w/Pulley & Rail	10 Lbs.
Dimensions w/Rail	10.5" x 7.9" x 5.8"

Prrrr-o-Lator not included.

INLET CONDITION CHECK-LIST

Inadequate inlet conditions can cause serious malfunctions in the best designed pump. Suprisingly, the simplest of things can cause the most severe problems. Some of these conditions can go unnoticed to the unfamiliar or untrained eye. To help eliminate some of these costly headaches, we have put together a check list of probable cause areas which should be evaluated before operation of any system. Remember, no two systems are alike, so there can be no **ONE** best way to set-up a system. All factors must be carefully considered.

INLET SUPPLY should be adequate to accommodate the maximum flow being delivered by the pump.

- ☐ Avoid closed loop systems, especially at higher temperatures and larger volumes. By-pass should be returned to a holding tank.
- ☐ Low vapor pressure fluids, such as solvents, require a booster pump for adequate inlet supply.
- ☐ Higher viscosity fluids require a positive NPSH for adequate inlet supply.
- ☐ Higher temperature fluids tend to vaporize and require a positive NPSH for adequate supply.
- ☐ When using an inlet holding tank, size it to provide adequate fluid to accommodate the maximum output of the pump, generally a minimum of five times the GPM (however, a combination of system factors can change this requirement significantly); provide adequate baffling in the tank to eliminate air bubbles and turbulence; install diffusers on all return lines to the tank.

INLET LINE SIZE should be adequate to avoid starving the pump.

- ☐ The line should generally be 1-1/2 to 2 times the specified pump inlet port size.
- ☐ The line MUST be a FLEXIBLE hose, NOT a rigid pipe, and reinforced on SUCTION systems to avoid collapsing.
- ☐ The simpler the inlet plumbing the less the potential for problems. Keep the length to a minimum, the number of elbows and joints to a minimum (ideally no elbows) and the inlet accessories to a minimum.
- ☐ Use pipe sealant to assure air-tight, positive sealing pipe joints.

INLET PRESSURE should fall within the specifications of the pump. These conditions vary slightly from the plunger to the piston pumps.

- ☐ Higher temperatures require pressurized inlet.
- ☐ Optimum pump performance is achieved with a flooded or pressurized inlet, however, negative feed is possible under ideal conditions.

INLET ACCESSORIES are designed to protect against overpressurization, monitor inlet flow, control contamination, control temperature and provide ease of servicing.

- ☐ All accessories should be sized to avoid restricting the inlet flow.
- ☐ A pressure gauge is recommended to monitor the inlet pressure and should be mounted AS CLOSE TO THE PUMP INLET as possible.
- ☐ All accessories should be compatible with the solution being pumped to avoid malfunction.

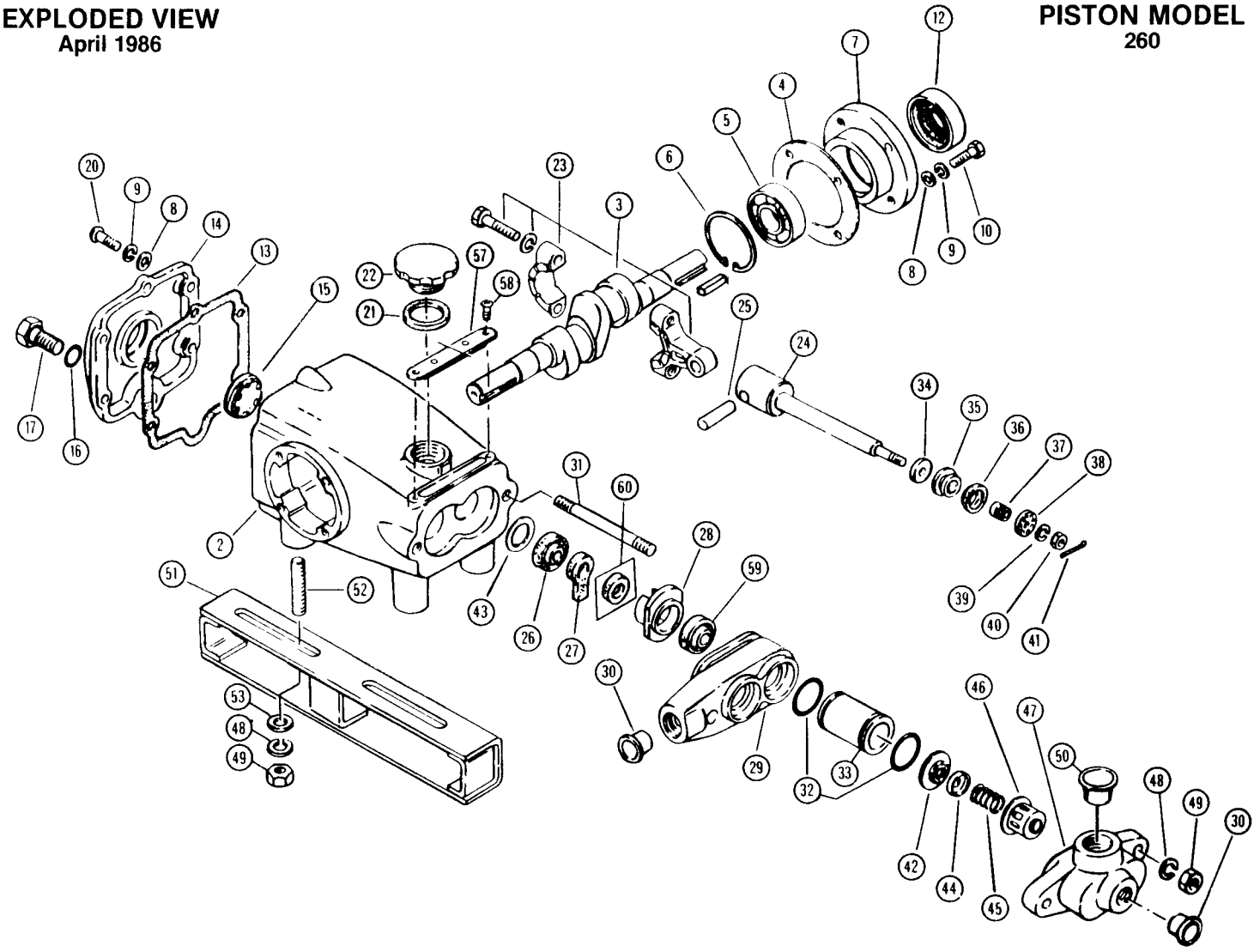
BY-PASS TO INLET Care should be exercised when deciding the method of by-pass. It is recommended the by-pass be directed to a baffled reservoir tank, with at least one baffle between the by-pass line and the inlet line to the pump. Although not recommended, by-pass fluid may be returned to the inlet line of the pump if the system is properly designed to protect your pump. When using this method a PRESSURE REDUCING VALVE should be installed on the inlet line to avoid excessive pressure to the inlet of the pump. (**REDUCING VALVE** SHOULD BE INSTALLED **BETWEEN** THE BY-PASS CONNECTION AND THE INLET TO THE PUMP) It is also recommended that a TEMPERATURE SENSING VALVE be used to monitor the temperature build-up in the by-pass loop to avoid premature seal failure.

- ☐ A low-pressure, flexible cloth braid (not metal braid) hose should be used from the by-pass connection to the inlet of the pump.
- ☐ It is recommended to use a minimum 24" by-pass hose.
- ☐ On any new installation or during periodic maintenance or trouble-shooting, it is recommended that the pressure in the by-pass line be checked to avoid overpressurizing the inlet.

See High Pressure Guide for more information on pump protection and maintenance.

EXPLODED VIEW
April 1986

PISTON MODEL
260



PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY.
2	25357	Crankcase, 5 Screw	1
3	22923	Crankshaft	1
4	25526	Gasket, Bearing Case	2
5	13832	Bearing	2
6	12381	Retaining Ring, Internal	2
7	24279	Bearing Case	2
8	12488	Washer, Flat	13
9	12502	Lock Washer	13
10	92520	Hex Head Screw, Sems M6 x 20	8
12	20355	Oil Seal, Crankshaft	2
13	24278	Gasket, Crankcase Cover	1
14	24277	Crankcase Cover	1
15	22289	Oil Gauge	1
16	23170	O-Ring, Drain Plug	1
17		Drain Plug, Oil	5
20	92519	Hex Head Screw, Sems M6 x 16	5
21	23172	O-Ring, Oil Cap	1
22	27561	Oil Filler Cap	1
23	16941	Connecting Rod Ass'y	2
24	24281	Piston Rod	2
25	16948	Piston Rod Pin	2
26	25461	Oil Seal	2
27	22158	Wick, Oil	2
28	23942	Seal Retainer	2
29	—	Inlet Manifold	1
30	23946	Plug, Plastic	2
31	14053	Stud	2
32	23172	O-Ring, Cylinder	4
33	24285	Cylinder	2
34	22020	Valve, Inlet	2
35	22021	Piston	2
36	43172	Piston Cup, M20, Viton	2
37	23357	Spacer, Piston	2
38	22023	Retainer, Piston	2
39	15848	Lock Washer	2
40	27986	Slotted Nut, S.S., M5	2
41	14158	Cotter Pin, S.S., M1.5 x 10	2
42	29487	Discharge Valve Seat	2
43	20017	Retainer, Seal	2
44	22842	Valve, Discharge	2
45	22031	Valve Spring	2
46	22841	Retainer, Valve Spring	2
47	23945	Discharge Manifold	1
48	15845	Lock Washer	6
49	81109	Hex Nut, M8, Reg. Thread	6
50		Plug, Plastic	1
51	23950	Mounting Rail	2
52	14137	Stud, Mounting	4
53	12489	Washer, Flat	4
57		Cover, Oil Wick	1
58		Screw	2
59	100015	Seal, Viton	2
60		Felt Packing	2
—	30032	5" A Pulley	1
—		Set Screw	1
—	30047	Key, 5MM	1