

# MODEL 1050M.CO<sub>2</sub>



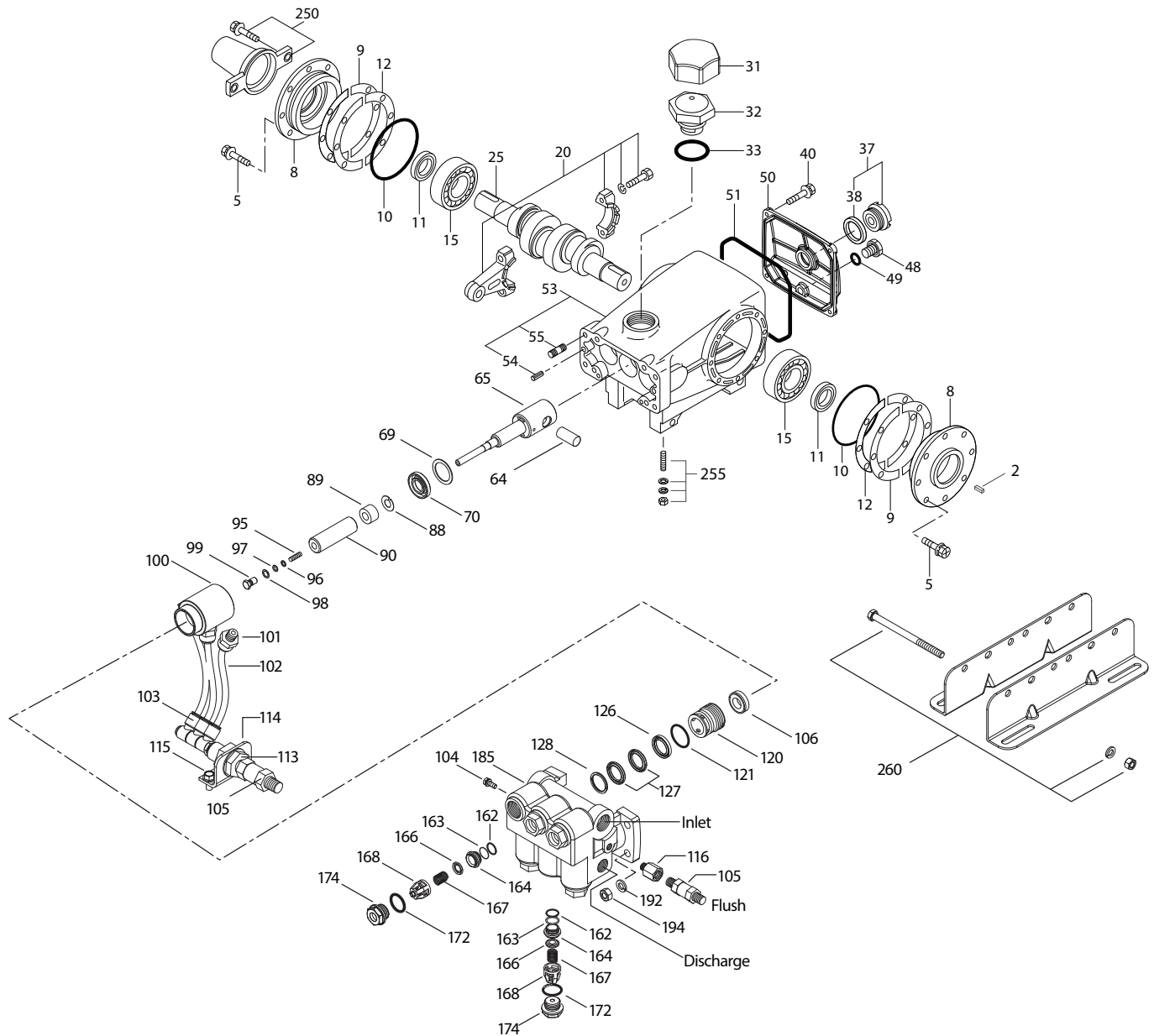
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	4.0 gpm	15 lpm
Pressure Range	400 – 2200 psi	27.5 – 152 bar
Pump RPM*	450	450
Inlet Pressure Range**	300 – 400 psi	21 – 27.5 bar
Min. Liquid Temperature	-20° F	-29° C
Bore	0.945"	24 mm
Stroke	1.181"	30 mm
Crankcase Capacity	42 oz.	1.26 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	¾" NPT(F)	¾" NPT(F)
Flush Ports (2)	⅛" NPT(F)	⅛" NPT(F)
Discharge Ports (2)	½" NPT(F)	½" NPT(F)
Shaft Diameter	1.181"	30 mm
Pulley Mounting	Either side	Either side
Weight	44 lbs.	20 kg
Dimensions	16.28 x 12.99 x 6.44"	414 x 330 x 164 mm

\* Pump minimum is 100 RPM.

\*\* Temperature and pressure must be maintained to keep incoming CO<sub>2</sub> in a liquid state.

## EXPLODED VIEW



(Parts List on Reverse Side)

July 2020

## PARTS LIST

ITEM	PN	MATL	DESCRIPTION	QTY
2	30067	STL	Key (M8 x 7.5 x 25)	1
5	126540	STCP R	Screw, HHC Sems (M8 x 20) (See Tech Bulletin 074, 128)	8
8	134805	ALE	Cover, Bearing (See Tech Bulletin 118, 128)	2
9	855043	FBR	Shim, Split, Bearing Cover 2 – Piece (See Tech Bulletin 128)	2/4
10	11340	NBR	O-Ring, Bearing Cover – 70D	2
11	43495	NBR	Seal, Oil, Crankshaft	2
12	855044	S	Shim, Split, Bearing Cover 2 – Piece (See Tech Bulletin 128)	0/4
15	39060	STL	Bearing, Roller	2
20	768600	TNM	Rod, Connecting Assembly (with PLM Bushing) (See Tech Bulletin 074)	3
25	43494	FCM	Crankshaft, Dual End	1
31	828710	PE	Protector, Oil Cap with Foam Gasket	1
32	43211	ABS	Cap, Oil Filler	1
33	14177	NBR	O-Ring, Filler Cap – 70D	1
37	92241	PC	Gauge, Oil, Bubble w/Gasket – 80D (See Tech Bulletin 074)	1
38	44428	NBR	Gasket, Flat, Oil Gauge – 80D	1
40	126541	STCP R	Screw, HHC Sems (M6 x 20) (See Tech Bulletin 074)	4
48	25625	STCP	Plug, Drain (1/4" x 19BSP)	1
49	23170	NBR	O-Ring, Drain Plug – 70D	1
50	133576	ALE	Cover, Rear (See Tech Bulletin 118)	1
51	44834	NBR	O-Ring, Rear Cover – 70D	1
53	134836	ALE	Crankcase with Guide Pins, Studs (See Tech Bulletin 118, 128)	1
54	27488	S	Pin, Guide	2
55	126545	STCP R	Stud, Manifold (M10 x 45) (See Tech Bulletin 128)	4
64	763507	CM	Pin, Crosshead (with Flats)	3
65	765258	SHS	Rod, Plunger (with Set Screws)	3
69	126592	STCP R	Washer, Oil Seal	3
70	43500	NBR	Seal, Oil, Crankcase	3
88	45675	S	Washer, Keyhole	3
89	43553	BB	Collar, Spacer	3
90	43552	CC	Plunger (M24 x 77)	3
95	89651	SS	Stud, Plunger Retainer (M6 x 70)	3
96	43235	PTFE	Back-up Ring, Plunger Retainer	3

ITEM	PN	MATL	DESCRIPTION	QTY
97	17399	NBR	O-Ring, Plunger Retainer – 80D	3
98	44041	SS	Gasket, Plunger Retainer	3
99	44031	SS	Retainer, Plunger (M6) (See Tech Bulletin 074)	3
100	765001	AL	Retainer, Seal	3
101	999490	D	Adapter	3
102	999492	NY	Tubing	3
103	999491	PLM	Manifold	1
104	34507	BB	Plug [1/8" NPT(M)]	1
105	33937	SS	Valve, Check [1/4" NPT(M)]	2
106	701437	SFTA	Seal, LPS with SS-Spring	3
113	34338	BB	Union [1/4" NPT(M)]	1
114	34347	STZP	Bracket	1
115	990776	STZP R	Screw, HHC (1/4"- 20 x 1/2")	2
116	999105	SS	Adapter [1/8" NPT(M) x 1/4" NPT(F)]	1
120	49290	BB	Case, Seal	3
121	14762	NBR	O-Ring, Seal Case – 70D	3
126	43558	BB	Adapter, Female	3
127	103692	STG	V-Packing	6
128	43560	BB	Adapter, Male	3
162	43248	PTFE	Back-up Ring, Valve Seat	6
163	43249	NBR	O-Ring, Seat – 80D	6
164	44718	S	Seat	6
166	43721	S	Valve	6
167	43751	S	Spring, Valve	6
168	44564	PVDF	Retainer, Spring	6
172	17617	NBR	O-Ring, Valve Plug – 90D	6
174	43851	BBCP	Plug, Valve (See Tech Bulletin 074)	6
185	46704	BBCP	Head, Manifold, Flushed (1/8" Flushed Port)	1
192	126231	STCP	Lockwasher (M10)	4
194	126522	STCP R	Nut, Hex (M10)	4
250	855046	NY	Protector, Shaft with two SS – Screws (See Tech Bulletin 128)	1
255	30264	STZP	Kit, Direct Mount	1
260	30613	STZP	Mount, Rail, Assembly	1
300	703135	NBR*	Kit, Seal (Includes: 97, 106, 121, 127)	1
310	34387	NBR	Kit, Valve Preassembled (Includes: 162, 163, 164, 166, 167, 168, 172)	2
—	6107	—	Oil, Bottle (21 oz.) ISO 68 Hydraulic	2

*Italics are optional items.*

[ ] Date of latest production change. R components comply with RoHS Directive.

\*Review individual parts in each kit for material code identification. For additional technical information see [www.catpumps.com/literature/tech-bulletins](http://www.catpumps.com/literature/tech-bulletins).

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum ALE=Aluminum Epoxy BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=Chrome-moly  
D=Acetal FBR=Fiber FCM=Forged Chrome-moly NBR=Medium Nitrile (Buna-N) NY=Nylon PC=Poly Carbonate PE=Polyethylene PLM=Unspecified Poly  
PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SHS= 304SS/High Strength SFTA=Special Blend PTFE Tan SS=316SS  
STCP=Steel/Chrome Plated STG=Special Blend PTFE White STL=Steel  
STZP=Steel/Zinc Plated TNM=Special High Strength

### ⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (i.e. regulator, unloader) and a secondary pressure relief device (i.e. pop-off valve, relief valve). Failure to install such relief devices could result in personal injury or damage to pump or property. Cat Pumps does not assume any liability or responsibility for the operation of a customer's high-pressure system.

Read all CAUTIONS and WARNINGS before commencing service or operation of any high-pressure system. The CAUTIONS and WARNINGS are included in each Service Manual and with each Accessory Data sheet. CAUTIONS and WARNINGS can also be viewed online at [www.catpumps.com/dynamic-literature/cautions-and-warnings](http://www.catpumps.com/dynamic-literature/cautions-and-warnings) or can be requested directly from Cat Pumps.

### WARRANTY

View the Limited Warranty on-line at [www.catpumps.com/literature/cat-pumps-limited-warranty](http://www.catpumps.com/literature/cat-pumps-limited-warranty)