

MODEL 3521CM.CO₂



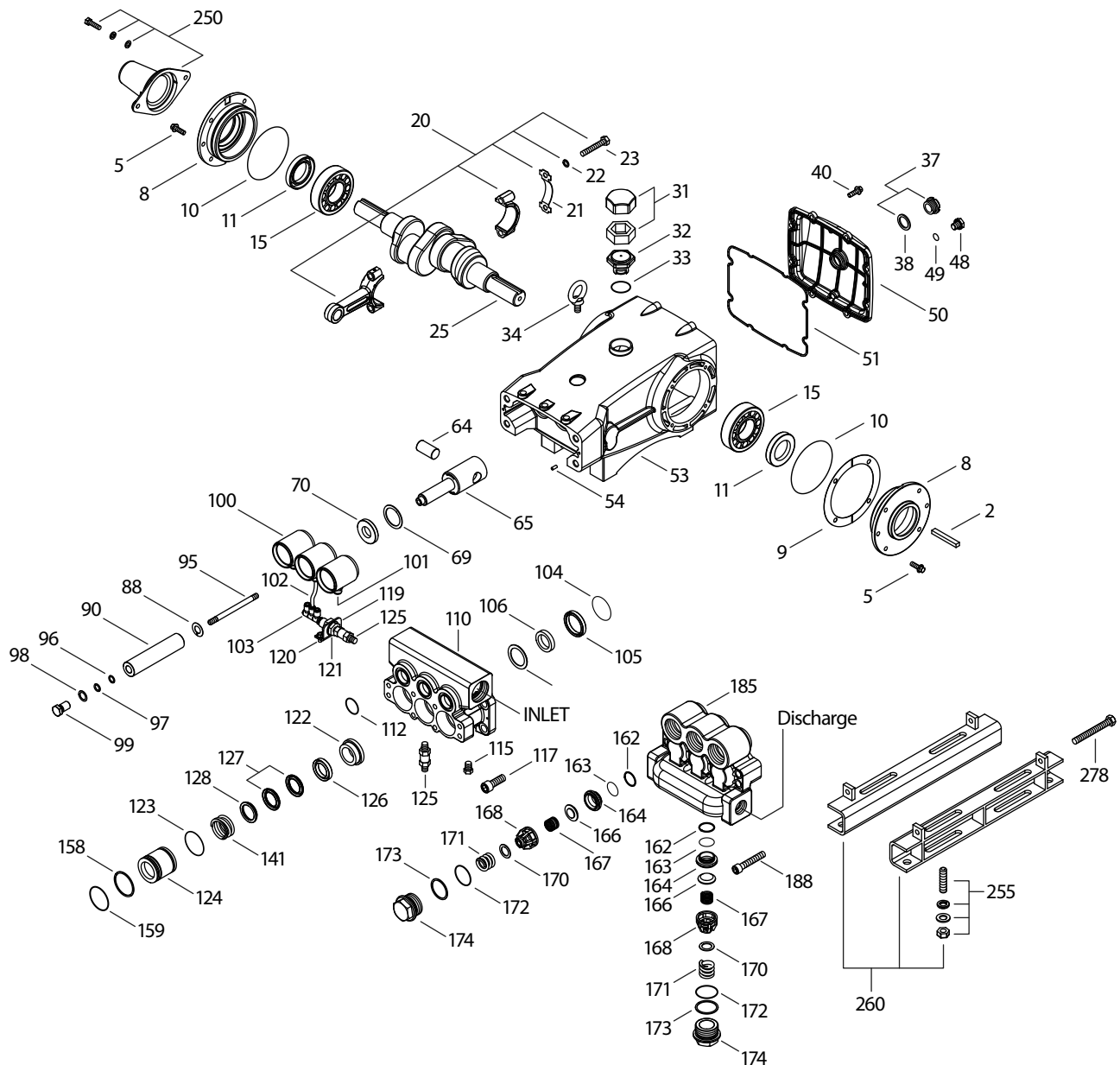
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	11.4 gpm	43.1 lpm
Pressure Range	400 to 2000 psi	27.5 to 138 bar
Pump RPM*	450	450
Inlet Pressure Range**	300 to 400 psi	21 to 27.5 bar
Above 130°F call Cat Pumps for inlet conditions and elastomer recommendations.		
Bore	1.260"	32 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts.	4 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1 1/2" NPT(F)	1 1/2" NPT(F)
Flush Ports (2)	1/4" NPT(F)	1/4" NPT(F)
Discharge Ports (2)	1" NPT(F)	1" NPT(F)
Shaft Diameter	1.378"	35 mm
Pulley Mounting	Either Side	Either Side
Weight	139 lbs.	63 kg
Dimensions	24.33 x 18.11 x 9.72"	618 x 460 x 247 mm

*Pump minimum is 100 RPM.

** Temperature and pressure must be maintained to keep incoming CO₂ in a liquid state.

EXPLODED VIEW



(Parts List on Reverse Side)

June 2018

PARTS LIST

ITEM PN	MATL	DESCRIPTION	QTY
2	34021	STL Key (M10x8x70)	1
5	125753	S Screw, HH Sems (M8x25)	8
8	44542	AL Covering, Bearing (See Tech Bulletin 118)	2
9	815279	FBR Shim, Split 2-Pc	0-2
10	12398	NBR O-Ring, Bearing Cover - 70D	2
11	13296	NBR Seal, Oil, Crankshaft	2
15	29326	STL Bearing, Roller	2
20	761467	TNM Assembly, Connecting Rod (Incls: 21,22,23)	3
21	126749	STCP R Washer, Locking (M10)	3
22	126593	STCP R Shim, Washer (M10.5x1.5)	6
23	122045	STZP Screw, HH (M10x55)	6
25	29325	FCM Crankshaft, Dual End (M48)	1
31	828710	PE Protector, Oil Cap w/Polyurethane Gasket	1
32	43211	ABS Cap, Oil Filler	1
33	14177	NBR O-Ring, Oil Filler Cap - 70D	1
34	126743	STCP R Bolt, Eye (M12x1.75) (For Lifting Pump Only)	1
37	92241	— Gauge, Oil, Bubble w/Gasket	1
38	44428	NBR Gasket, Flat, Oil Gauge	1
40	125753	S Screw, HH Sems (M8x25)	8
48	25625	STCP Plug, Drain (1/4"x19BSP)	1
49	23170	NBR O-Ring, Drain Plug - 70D	1
50	45936	AL Cover, Rear (See Tech Bulletin 118)	1
51	16612	NBR O-Ring, Rear Cover - 70D	1
53	44487	AL Crankcase Assy (Incls: 34,54) (See Tech Bulletin 118)	1
54	27488	S Pin, Guide	2
64	763864	CM Pin, Crosshead (w/flats)	3
65	765116	SSZZ Rod, Plunger	3
69	126587	STCP R Washer, Oil Seal	3
70	100488	NBRS Seal, Oil, Crankcase	3
88	45676	S Washer, Keyhole	3
90	43957	CC Plunger (M32x145)	3
95	89778	SS Stud, Plunger Retainer (M10 x 135)	3
96	20189	PTFE Back-up-Ring, Plunger Retainer	3
97	11345	NBR O-Ring, Plunger Retainer	3
98	44085	SS Gasket, Plunger Retainer	3
99	44084	SS Retainer, Plunger (M10)	3
100	999324	AL Retainer, Seal	3
101	999490	D Adapter 1/4"	3
102	999492	NY Tubing 1/4"	3
103	999491	PLM Manifold [3" x 1/4" NPT(M)]	1
104	43875	NBR O-Ring, Inlet Adapter	3
105	45562	SS Adapter, Inlet	3

ITEM PN	MATL	DESCRIPTION	QTY
106	702285	TFDA Seal, LPS, w/SS-Spg	3
107	44101	SS Washer	3
110	125397	SS Manifold, Inlet	1
112	11379	NBR O-Ring, Inlet Manifold	3
115	22177	BBCP Plug, HH [1/4" NPT(M)]	1
117	44585	S Screw, HSH (M14x40)	4
119	34347	STZP Bracket	1
120	990776	STZP R Screw, HHC (1/4" - 20 x 1/2")	2
122	49782	SS Spacer (See Tech Bulletin 114)	3
123	12391	NBR O-Ring, V-Packing Cylinder	3
124	49783	SS Cylinder, V-Packing (See Tech Bulletin 114)	3
125	33937	SS Valve, Check [1/4" NPT(M)]	2
126	48390	D Adapter, Female	3
127	44608	STG V-Packing	6
128	45565	SS Adapter, Male	3
141	49743	SS Spring, Large Coil (See Tech Bulletin 114)	3
158	48362	D Back-up-Ring, V-Packing Spacer	3
159	48860	NBR O-Ring, V-Packing Spacer	3
162	48363	D Back-up-Ring, Seat	6
163	26142	NBR O-Ring, Seat	6
164	44612	SS Seat	6
166	44108	SS Valve	6
167	44109	SS Spring	6
168	44728	PVDF Retainer, Spring	6
170	44729	SS Washer, Spring	6
171	44644	SS Spring, Coil	6
172	89827	NBR O-Ring, Valve Plug	6
173	48364	D Back-up-Ring, Valve Plug	6
174	49300	SSD Plug, Valve	6
185	49299	SSD Manifold, Discharge	1
188	89981	S Screw, HSH (M12x70)	8
250	44516	NY Protector, Shaft	1
255	34039	S Mount, Direct	1
260	92674	STZP R Mount, Rail Assembly	1
278	80540	STZP Screw, HH (M12x100) (Rail Adjusting Screw)	2
290	6124	— Gasket, Liquid (3 oz.)	1
300	76114	NBR* Kit, Seal (Incls: 97, 104, 106, 112, 123, 127, 158, 159)	1
310	34017	NBR Kit, Valve Preassembled (Incls: 162-164, 166-168, 170, 172, 173)	2
—	6100	— Oil, Case [(12) 21 oz Bottles] ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up)	1

Italics are optional items. R Components comply with RoHS Directive.

See Tech Bulletins 003, 024, 036, 074, 083, 084, 087, 095, 114 and 118

*Review individual parts in each kit for material identification

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum BBCP=Brass/Chrome-Plated CC=Ceramic CM=ChromeMoly D=Acetal
 FBR=Fiber FCM=Forged Chrome-Moly NBR=Medium Nitrile (Buna-N) NBRS=Buna,Silicone Free NY=Nylon PLM=Unspecified Poly PTFE=Pure Polytetrafluoroethylene
 PVDF=Polyvinylidene Fluoride PE=Polyethylene S=304SS SS=316SS SSD=Duplex Stainless Steel SSZZ=316SS/Zamak STCP=Steel/Chrome Plated STL=Steel
 STZP=Steel/Zinc Plated TFDA=PTFE FDA 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/cautions-warnings or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty on-line at www.catpumps.com/warranty.



CAT PUMPS

1681 - 94th Lane N.E. Minneapolis, MN 55449-4324

Phone (763) 780-5440 · Fax (763) 780-2958 · e-mail: techsupport@catpumps.com · www.catpumps.com