

MODEL 3521CMHS.CO2

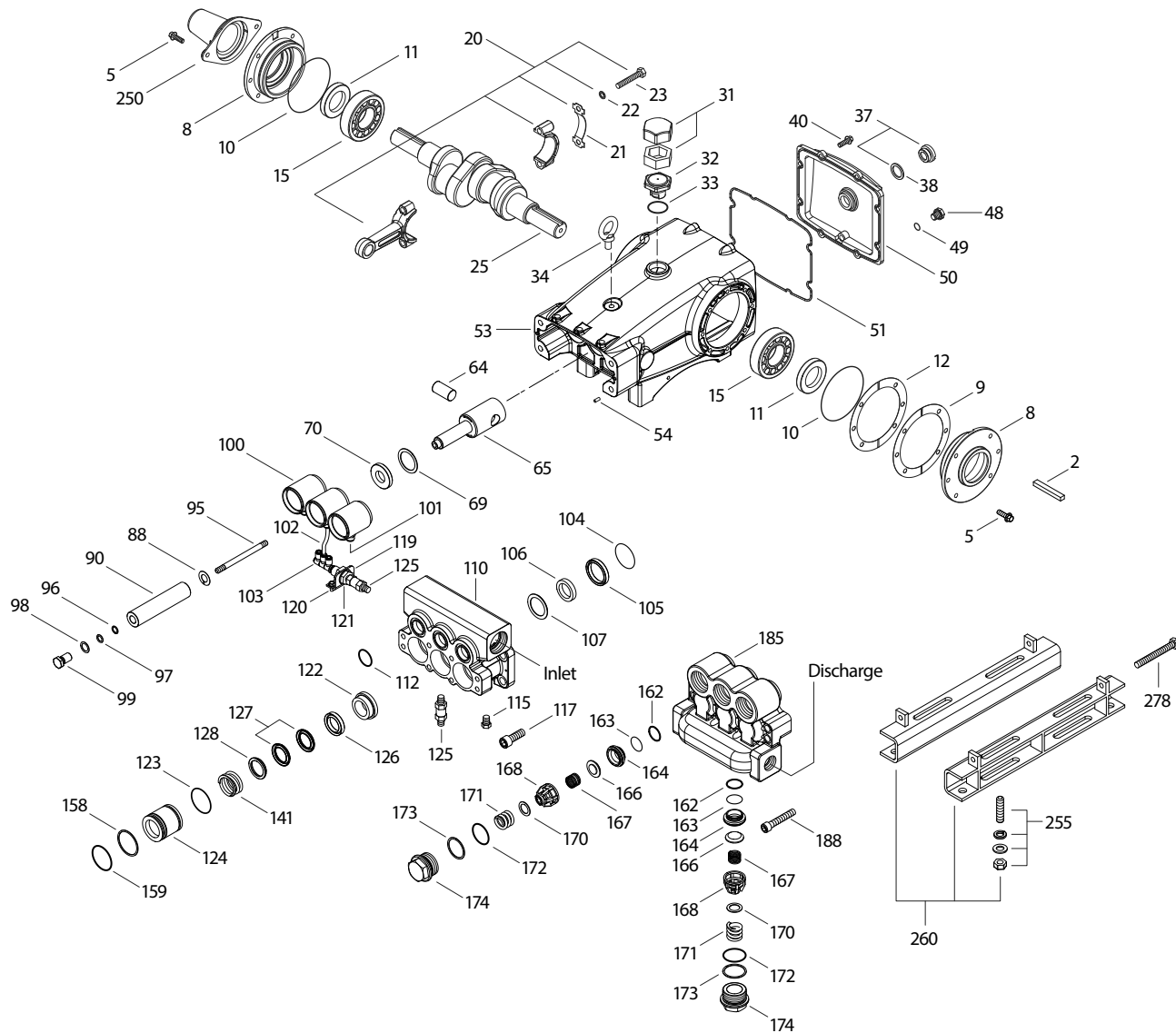
SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	11.4 gpm	43.1 lpm
Pressure Range	400–2000 psi	27.5–138 bar
Pump RPM*	450 rpm	450 rpm
Inlet Pressure Range**	300–400 psi	21–27.5 bar
Min. Liquid Temperature**	-20° F	-29° C
Bore	1.260"	32 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts	4 l

SPECIFICATIONS	U.S. Measure	Metric Measure
Inlet Ports (2)	1½" NPT(F)	1½" NPT(F)
Flush Ports (2)	¼" NPT(F)	¼" 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

ITEM	PN	MATL DESCRIPTION	QTY
2	34021	STL Key (M10 x 8 x 70)	1
5	96049	S Screw, HH Sems (M10 x 25) (See Tech Bulletin 074)	8
8	134604	ALE Covering, Bearing	2
9	815279	FBR Shim, Split 2-Piece	0-2
10	12398	NBR O-Ring, Bearing Cover-70D	2
11	13296	NBR Seal, Oil, Crankshaft	2
12	855049	S Shim, Split 2-Piece	0-2
15	29326	STL Bearing, Roller	2
20	76164	BZ Assembly, Connecting Rod (Includes: 21, 22, 23) (See Tech Bulletin 074)	3
21	126749	STCP R Washer, Locking (M10)	3
22	126593	STCP R Shim, Washer (M10.5 x 1.5)	6
23	122045	STZP Screw, HH (M10 x 55)	6
25	29325	FCM Crankshaft, Dual End (M48)	1
31	828710	PE Protector, Oil Cap with 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 (M12 x 1.75) (For Lifting Pump Only)	1
37	92241	PC Gauge, Oil, Bubble with Gasket (See Tech Bulletin 074)	1
38	44428	NBR Gasket, Flat, Oil Gauge	1
40	125753	S Screw, HH Sems (M8 x 25) (See Tech Bulletin 074)	8
48	25625	STCP Plug, Drain (1/4" x 19BSP)	1
49	23170	NBR O-Ring, Drain Plug-70D	1
50	45936	ALE Cover, Rear	1
51	16612	NBR O-Ring, Rear Cover-70D	1
53	134784	ALE Crankcase Assembly (Includes: 54)	1
54	27488	S Pin, Guide	2
64	763864	CM Pin, Crosshead (With Flats)	3
65	76163	SSHB Rod, Plunger	3
69	126587	STCP R Washer, Oil Seal	3
70	100488	NBR S Seal, Oil, Crankcase	3
88	45676	S Washer, Keyhole	3
90	43957	CC Plunger (M32 x 145)	3
95	89778	SS Stud, Plunger Retainer (M10 x 135)	3
96	20189	PTFE Backup 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) (See Tech Bulletin 074)	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-70D	3

ITEM	PN	MATL DESCRIPTION	QTY
105	45562	SS Adapter, Inlet	3
106	702285	TFDA Seal, Low-Pressure with SS-Spring	3
107	44101	SS Washer, Low-Pressure Seal	3
110	125397	SS Manifold, Inlet, Flushed	1
112	11379	NBR O-Ring, Inlet Manifold	3
115	22177	BBCP Plug, HH (1/4" NPT[M])	1
117	44585	S Screw, HSH (M14 x 40) (See Tech Bulletin 074)	4
119	34347	STZP Bracket	1
120	990776	STZP R Screw, HHC (1/4" - 20 x 1/2")	2
122	49782	SS Spacer	3
123	12391	NBR O-Ring, V-Packing Cylinder	3
124	49783	SS Cylinder, V-Packing	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	3
158	48362	D Backup Ring, V-Packing Spacer	3
159	48860	NBR O-Ring, V-Packing Spacer	3
162	48363	D Backup 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 Backup Ring, Valve Plug	6
174	49300	SSD Plug, Valve (See Tech Bulletin 074)	6
185	49299	SSD Manifold, Discharge	1
188	89981	S Screw, HSH (M12 x 70) (See Tech Bulletin 074)	8
250	855042	NY Protector, Shaft	1
255	34039	S Mount, Direct	1
260	76514	S Mount, Rail Assembly	1
278	80540	STZP Screw, HH (M12 x 100) (Rail Adjusting Screw)	2
290	6124	— Gasket, Liquid (3 oz)	1
—	32273	— Crankcase Oil Seal and Installation Kit (Includes: Oil Seals, Guide Tool, Screws, Washers, Driver)	1
300	76114	NBR* Kit, Seal (Includes: 97, 104, 106, 112, 123, 127, 158, 159)	1
310	34017	NBR Kit, Valve Preassembled (Includes: 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.

For additional technical information see www.catpumps.com/literature/tech-bulletins.

*Review individual parts in each kit for material identification MATERIAL CODES (Not Part of Part Number):

ABS=ABS Plastic AL=Aluminum ALE=Aluminum Epoxy BBCP=Brass/Chrome Plated BZ=Bronze CC=Ceramic CM=Chrome Moly D=Acetal
 EFDA=EPDM FDA FBR=Fiber FCM=Forged Chrome-Moly NBR=Medium Nitrile (Buna-N) NBR S=Buna, Silicone Free NY=Nylon PC=Poly Carbonate
 PE=Polyethylene PLM=Unspecified Poly PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride PE=Polyethylene S=304SS SS=316SS
 SSD=Duplex Stainless Steel SSHB=316SS/High Strength Brass 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 (e.g. regulator, unloader) and a secondary pressure relief device (e.g. 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 or can be requested directly from Cat Pumps.

WARRANTY

View the Limited Warranty online at www.catpumps.com/literature/cat-pumps-limited-warranty