

# MODEL 1051CM.CO2



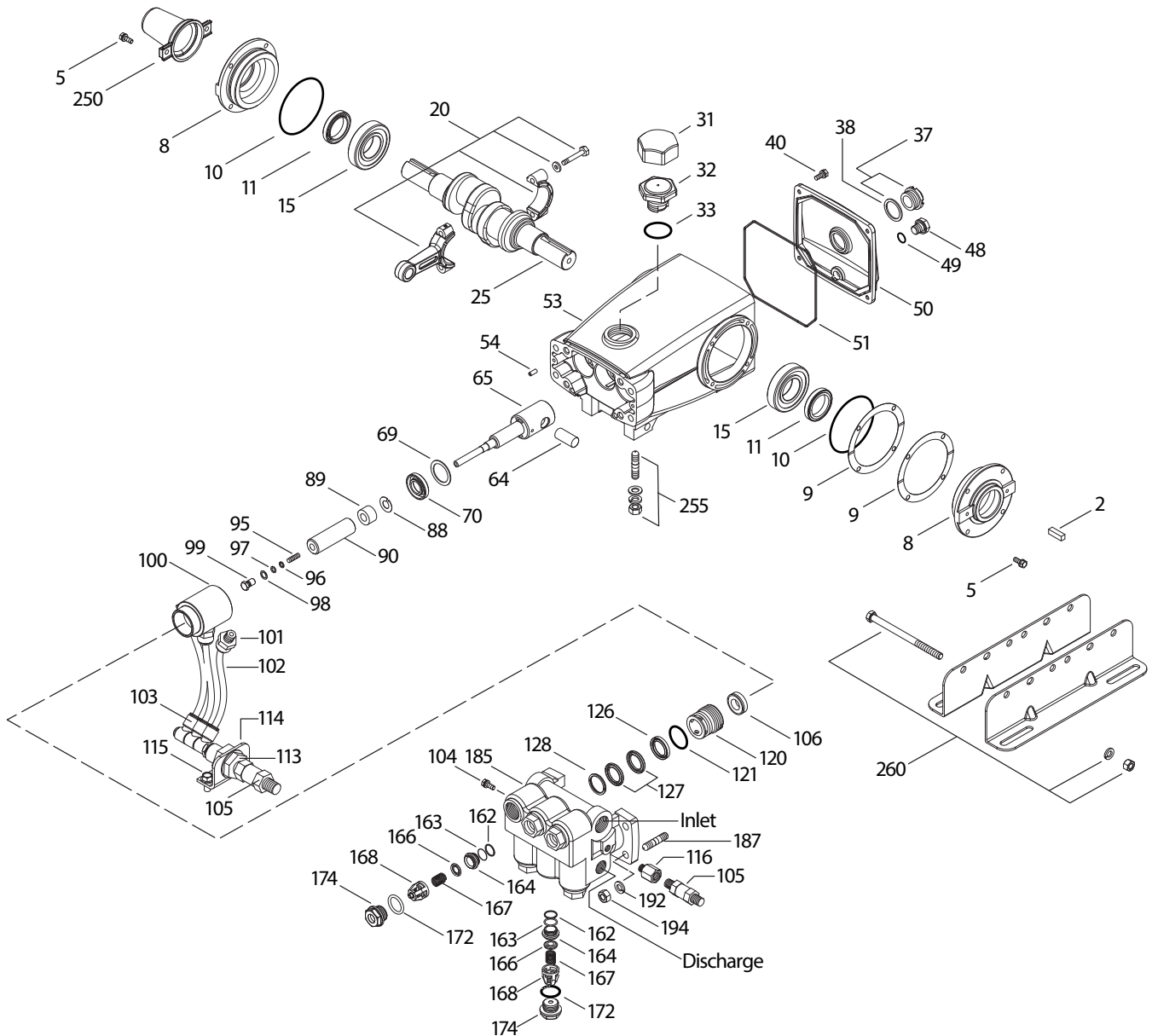
| SPECIFICATIONS          | U.S. Measure    | Metric Measure  |
|-------------------------|-----------------|-----------------|
| Flow                    | 4.0 gpm         | 15 lpm          |
| Pressure Range          | 400 to 2200 psi | 27.5 to 152 bar |
| Pump RPM*               | 450             | 450             |
| Inlet Pressure Range**  | 300 to 800 psi  | 21 to 55 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          |
| Inlet Ports (2)         | 3/4" NPT(F)     | 3/4" NPT(F)     |

| SPECIFICATIONS      | U.S. Measure          | Metric Measure     |
|---------------------|-----------------------|--------------------|
| Flush Ports (2)     | 1/8" NPT(F)           | 1/8" NPT(F)        |
| Discharge Ports (2) | 1/2" NPT(F)           | 1/2" 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)

January 2017

## PARTS LIST

| ITEM | PN     | MATL   | DESCRIPTION                              | QTY |
|------|--------|--------|--|-----|
| 2    | 30067  | STL    | Key (M8x7.5x25))                         | 1   |
| 5    | 92538  | S      | Screw, HHC Sems (M6x16)                  | 8   |
| 8    | 43496  | AL     | Cover, Bearing                           | 2   |
| 9    | 815281 | FBR    | Shim, Split, Bearing Cover 2-Pc          | 2/4 |
|      | 814800 | S      | Shim, Split, Bearing Cover 2-Pc          | 0/4 |
| 10   | 11340  | NBR    | O-Ring, Bearing Cover - 70D              | 2   |
| 11   | 43495  | NBR    | Seal, Oil, Crankshaft - 70D              | 2   |
| 15   | 39060  | STL    | Bearing, Roller                          | 2   |
| 20   | 768600 | TNM    | Rod, Connecting Assembly (w/PLM Bushing) | 3   |
| 25   | 43494  | FCM    | Crankshaft, Dual End                     | 1   |
| 31   | 828710 | PE     | Protector, Oil Cap w/Foam Gasket         | 1   |
| 32   | 43211  | ABS    | Cap, Oil Filler                          | 1   |
| 33   | 14177  | NBR    | O-Ring, Filler Cap - 70D                 | 1   |
| 37   | 92241  | —      | Gauge, Oil, Bubble w/Gasket - 80D        | 1   |
| 38   | 44428  | NBR    | Gasket, Flat, Oil Gauge - 80D            | 1   |
| 40   | 92542  | S      | Screw, HHC Sems (M6x20)                  | 4   |
| 48   | 25625  | STCP   | Plug, Drain (1/4"x19BSP)                 | 1   |
| 49   | 23170  | NBR    | O-Ring, Drain Plug - 70D                 | 1   |
| 50   | 43491  | AL     | Cover, Rear                              | 1   |
| 51   | 44834  | NBR    | O-Ring, Rear Cover - 70D                 | 1   |
| 53   | 115471 | AL     | Crankcase w/Guide Pins                   | 1   |
| 54   | 27488  | S      | Pin, Guide                               | 2   |
| 64   | 763507 | CM     | Pin, Crosshead (w/Flats)                 | 3   |
| 65   | 765258 | SHS    | Rod, Plunger (w/Set Screws)              | 3   |
| 69   | 126592 | STCP R | Washer, Oil Seal                         | 3   |
| 70   | 43500  | NBR    | Seal, Oil, Crankcase - 80D               | 3   |
| 88   | 45675  | S      | Washer, Keyhole                          | 3   |
| 89   | 45879  | SS     | Collar, Spacer                           | 3   |
| 90   | 43552  | CC     | Plunger (M24x77)                         | 3   |
| 95   | 89651  | SS     | Stud, Plunger Retainer (M6x70)           | 3   |
| 96   | 43235  | PTFE   | Back-up-Ring, Plunger Retainer           | 3   |
| 97   | 17399  | NBR    | O-Ring, Plunger Retainer - 80D           | 3   |
| 98   | 44041  | SS     | Gasket, Plunger Retainer                 | 3   |
| 99   | 44031  | SS     | Retainer, Plunger (M6)                   | 3   |

| ITEM | PN     | MATL   | DESCRIPTION  | QTY |
|------|--------|--------|--|-----|
| 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 | SFTB   | Seal, LPS w/SS-Spg   | 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  | 49286  | SSNP   | Case, Seal   | 3   |
| 121  | 14762  | NBR    | O-Ring, Seal Case - 70D  | 3   |
| 126  | 48389  | D      | Adapter, Female  | 3   |
| 127  | 103692 | STG    | V-Packing  | 6   |
| 128  | 45074  | SS     | Adapter, Male  | 3   |
| 162  | 43248  | PTFE   | Back-up-Ring, Valve Seat   | 6   |
| 163  | 43249  | NBR    | O-Ring, Seat - 80D   | 6   |
| 164  | 44037  | SS     | Seat   | 6   |
| 166  | 48793  | SS     | Valve  | 6   |
| 167  | 44039  | SS     | Spring, Valve  | 6   |
| 168  | 44564  | PVDF   | Retainer, Spring   | 6   |
| 172  | 17617  | NBR    | O-Ring, Valve Plug - 90D   | 6   |
| 174  | 49293  | SS     | Plug, Valve  | 6   |
| 185  | 49188  | SS     | Head, Manifold, Flushed (1/8" Flushed Port)                        | 1   |
| 187  | 44005  | S      | Stud, Manifold (M10x45)  | 4   |
| 192  | 15847  | S      | Lockwasher (M10)   | 4   |
| 194  | 81258  | S      | Nut, Hex (M10)   | 4   |
| 250  | 307645 | NY     | Protector, Shaft w/Two SS Screws                                   | 1   |
| 260  | 30613  | STZP   | Mount, Rail, Assy  | 1   |
| 300  | 703135 | NBR*   | Kit, Seal (Incls: 97, 106, 121, 127)                               | 1   |
| 310  | 34387  | NBR    | Kit, Valve Preassembled (Incls: 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.

View Tech Bulletins 002, 003, 024, 027, 035, 036, 043, 045, 046, 048, 049, 052, 053, 072, 074, 083, 087, 089 and 098 for additional information.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum BB=Brass CC=Ceramic CM=Chrome-moly

D=Acetal FBR=Fiber FCM=Forged Chrome-moly NBR=Medium Nitrile (Buna-N) NY=Nylon PE=Polyethylene PLM=Unspecified Poly PTFE=Pure Polytetrafluoroethylene

PVDF=Polyvinylidene Fluoride S=304SS SHS=304SS/High Strength SS=316SS SFTB=Special Blend PTFE Black STG=Special Blend PTFE White STCP=Steel/Chrome Plated

SSNP=316SS/Nickel Plated 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/cautions-warnings](http://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](http://www.catpumps.com/warranty).



### CAT PUMPS

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