



## 7 Frame Plunger Pump

**Standard Models**

**53, 55**

**Gearbox Models**

**51, 58**

### FEATURES

#### Superior Design

- Triplex plunger design gives smoother liquid flow.
- Hi-Pressure Seals or V-Packings are completely lubricated and cooled by the liquid being pumped.
- Inlet and discharge valve assemblies interchange for easier maintenance.
- Lubricated Lo-Pressure Seals provide double protection against external leakage.
- Oil bath crankcase assures optimum lubrication.
- Close tolerance concentricity of the ceramic plunger maximizes seal life.
- Convenient Gearbox Pump version for direct mounting to gas engine.

#### Quality Materials

- All stainless steel valves are heat treated and seats are roller burnished for a positive seal and extended valve life.
- Forged brass manifold for strength and corrosion resistance.
- Special concentric, high density, polished, graphite impregnated, solid ceramic plungers are abrasion resistant and result in extended seal life.
- Specially formulated, CAT PUMP exclusive, Hi-Pressure Seals or V-Packings offer unmatched performance and seal life.
- Die cast aluminum crankcase provides high strength, minimum weight and precision tolerance control.
- Chrome-moly crankshaft gives unmatched strength and surface hardness.
- Oversized crankshaft bearings with greater loading capacity mean longer bearing life.

#### Easy Maintenance

- Wet-end is easily serviced without entering crankcase, requiring less time and effort.
- Valve assemblies are accessible without disturbing piping, for quick service.
- Preset packings mean no packing gland adjustment is necessary, reducing maintenance costs.

#### **⚠ WARNING**

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

### SPECIFICATIONS

|                            | U.S. Measure    | Metric Measure    | U.S. Measure    | Metric Measure    |
|----------------------------|-----------------|-------------------|-----------------|-------------------|
| <b>Standard Models</b>     | <b>53</b>       |                   | <b>55</b>       |                   |
| Flow .....                 | 5.0 GPM         | (19 L/M)          | 5.0 GPM         | (19 L/M)          |
| Pressure Range .....       | 100 to 2500 PSI | (7 to 175 BAR)    | 100 to 3000 PSI | (7 to 210 BAR)    |
| Inlet Pressure Range ..... | -5 to 60 PSI    | (0.35 to 4 BAR)   | -5 to 60 PSI    | (0.35 to 4 BAR)   |
| <b>RPM</b> .....           | <b>1100 RPM</b> | <b>(1100 RPM)</b> | <b>1415 RPM</b> | <b>(1415 RPM)</b> |
| Bore.....                  | 0.708"          | (18 mm)           | 0.630"          | (16 mm)           |
| <b>Stroke</b> .....        | <b>0.945"</b>   | <b>(24 mm)</b>    | <b>0.945"</b>   | <b>(24 mm)</b>    |

#### Gearbox Models

|                            | <b>51</b>                     |                   | <b>58</b>                     |                   |
|----------------------------|-------------------------------|-------------------|-------------------------------|-------------------|
|                            | <b>Gearbox 51G1 or 51G118</b> |                   | <b>Gearbox 58G1 or 58G118</b> |                   |
| Flow .....                 | 4.8 GPM                       | (18 L/M)          | 5.0 GPM                       | (19 L/M)          |
| Pressure Range .....       | 100 to 3000 PSI               | (7 to 210 BAR)    | 100 to 2500 PSI               | (7 to 175 BAR)    |
| Inlet Pressure Range ..... | Fld to 60 PSI                 | (Fld to 4 BAR)    | Fld to 60 PSI                 | (Fld to 4 BAR)    |
| <b>RPM</b> .....           | <b>1765 RPM</b>               | <b>(1765 RPM)</b> | <b>1570 RPM</b>               | <b>(1570 RPM)</b> |
| Bore.....                  | 0.630"                        | (16 mm)           | 0.708"                        | (18 mm)           |
| <b>Stroke</b> .....        | <b>0.728"</b>                 | <b>(18.5 mm)</b>  | <b>0.669"</b>                 | <b>(17 mm)</b>    |

### COMMON SPECIFICATIONS

|                                  |                     |                         |
|----------------------------------|---------------------|-------------------------|
| Crankcase Capacity .....         | 25 oz.              | (0.75 L)                |
| Maximum Liquid Temperature ..... | 160°F               | (71°C)                  |
| Inlet Ports (2).....             | 1/2" NPTF           | (1/2" NPTF)             |
| Discharge Ports (2) .....        | 3/8" NPTF           | (3/8" NPTF)             |
| Shaft Diameter.....              | 0.945"              | (24 mm)                 |
| Weight .....                     | 26.5 lbs.           | (12.0 kg)               |
| Dimensions (Pump Only).....      | 13.6 x 8.20 x 5.90" | (345 x 208.30 x 150 mm) |

### HORSEPOWER REQUIREMENTS

| MODEL     | FLOW     |      | PRESSURE |          |          |          | MOTOR PULLEY SIZE                             |             |
|-----------|----------|------|----------|----------|----------|----------|-----------------------------------------------|-------------|
|           |          |      | PSI 1800 | PSI 2000 | PSI 2500 | PSI 3000 | Using 1725 RPM Motor & Std. 9.75" Pump Pulley |             |
|           | U.S. GPM | L/M  | BAR 125  | BAR 140  | BAR 175  | BAR 210  | RPM                                           | Pulley O.D. |
| <b>53</b> | 5.0      | 19.0 | 6.2      | 6.9      | 8.6      | N/A      | 1100                                          | 6.3         |
|           | 4.5      | 17.0 | 5.6      | 6.2      | 7.7      | N/A      | 990                                           | 5.6         |
|           | 4.0      | 15.0 | 5.0      | 5.5      | 6.9      | N/A      | 880                                           | 5.0         |
| <b>55</b> | 5.0      | 19.0 | 6.2      | 6.9      | 8.6      | 10.3     | 1415                                          | 8.0         |
|           | 4.0      | 15.0 | 5.0      | 5.5      | 6.9      | 8.3      | 1130                                          | 6.4         |
|           | 3.0      | 11.4 | 3.7      | 4.2      | 5.2      | 6.2      | 850                                           | 5.0         |
| <b>58</b> | 5.0      | 19.0 | 6.2      | 6.9      | 8.6      | N/A      | 1570                                          | Gearbox     |
| <b>51</b> | 4.8      | 18.0 | 5.9      | 6.6      | 8.2      | 9.8      | 1765                                          | Gearbox     |

|                                      |                          |   |                         |
|--------------------------------------|--------------------------|---|-------------------------|
| <b>DETERMINING THE PUMP R.P.M.</b>   | <u>Rated G.P.M.</u>      | = | <u>"Desired" G.P.M.</u> |
|                                      | Rated R.P.M.             | = | "Desired" R.P.M.        |
| <b>DETERMINING THE REQUIRED H.P.</b> | <u>GPM x PSI</u>         | = | Electric Brake          |
|                                      | 1460                     | = | H. P. Required          |
| <b>DETERMINING MOTOR PULLEY SIZE</b> | <u>Motor Pulley O.D.</u> | = | <u>Pump Pulley O.D.</u> |
|                                      | Pump R.P.M.              | = | Motor R.P.M.            |

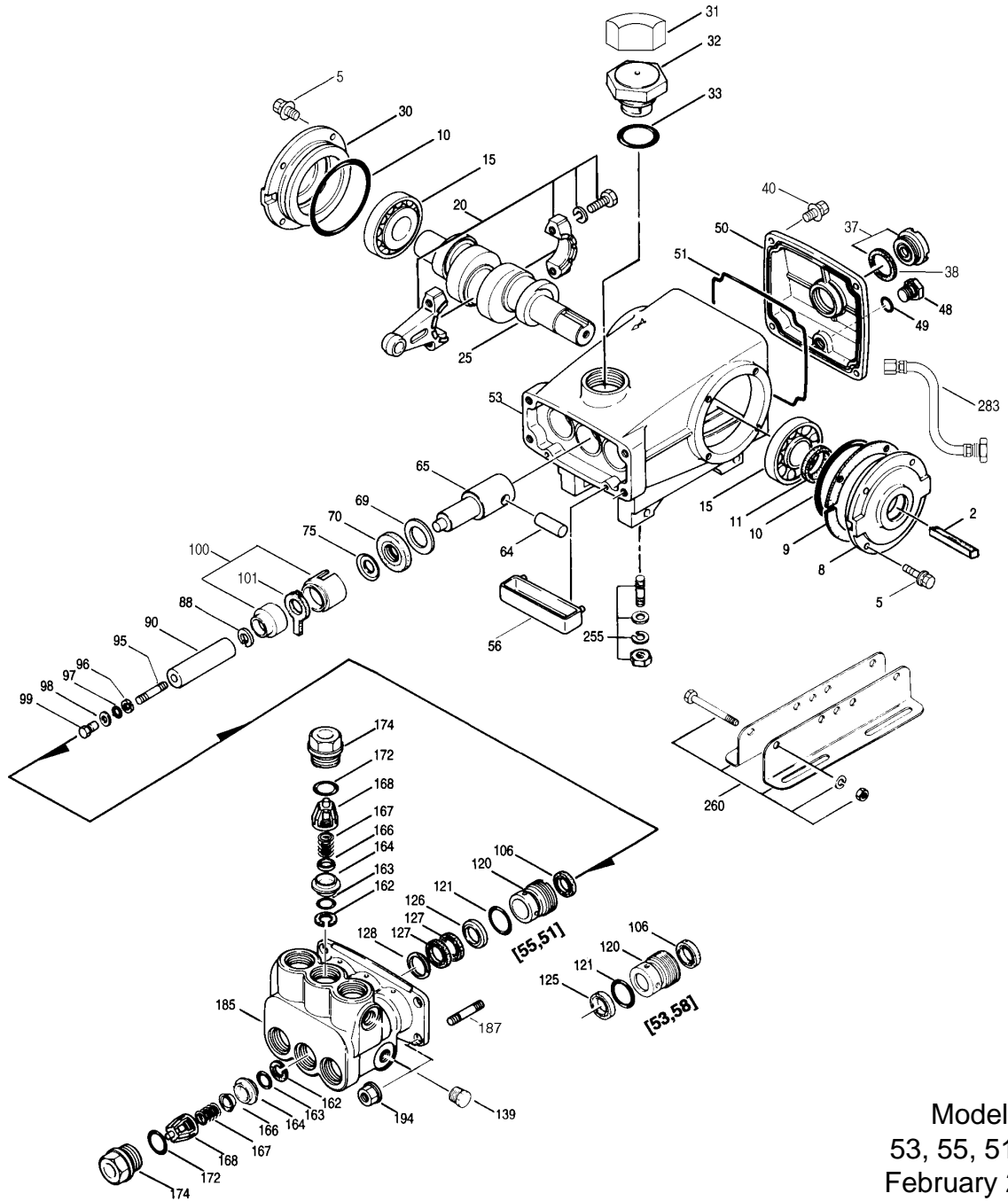
See complete Drive Packages [Incls: Pulleys, Belts, Hubs, Key] Tech Bulletin 003.  
Refer to pump Service Manual for repair procedure and additional technical information.

*"Customer confidence is our greatest asset"*

# PARTS LIST

| ITEM  | PART NUMBER       |                   |                   |                  | DESCRIPTION                                                   | QTY |
|-------|-------------------|-------------------|-------------------|------------------|---------------------------------------------------------------|-----|
|       | 51 MATL           | 55 MATL           | 53 MATL           | 58 MATL          |                                                               |     |
| ● 2   | 30067 STL         | 30067 STL         | 30067 STL         | 30067 STL        | Key (M8x7.5x25)                                               | 1 ● |
| 5     | 92519 STZP        | 92519 STZP        | 92519 STZP        | 92519 STZP       | Screw, Sems HHC (M6x16)                                       | 8   |
| 8     | 43466 AL          | 43466 AL          | 43466 AL          | 43466 AL         | Cover, Bearing                                                | 1   |
| 9     | 43261 FBR         | 43261 FBR         | 43261 FBR         | 43261 FBR        | Shim, Bearing Case                                            | 1   |
| 10    | 12393 NBR         | 12393 NBR         | 12393 NBR         | 12393 NBR        | O-Ring, Cover                                                 | 2   |
| 11    | 43222 NBR         | 43222 NBR         | 43222 NBR         | 43222 NBR        | Seal, Oil, Crankshaft                                         | 1   |
| 15    | 43221 STL         | 43221 STL         | 43221 STL         | 43221 STL        | Bearing, Roller                                               | 2   |
| 20    | 46302 HS          | 46302 HS          | 46302 HS          | 46302 HS         | Rod, Connecting Assy                                          | 3   |
| 25    | <b>44947 FCM</b>  | <b>43464 FCM</b>  | <b>43464 FCM</b>  | <b>44946 FCM</b> | Crankshaft - Single End                                       | 1   |
| 30    | 44967 AL          | 44967 AL          | 44967 AL          | 44967 AL         | Cover, Bearing, Blind                                         | 1   |
| 31    | —                 | 828710            | 828710            | —                | Protector, Oil Cap                                            | 1   |
| 32    | <b>44666 RTP</b>  | <b>43211 ABS</b>  | <b>43211 ABS</b>  | <b>44666 RTP</b> | Cap, Oil Filler, Domed                                        | 1   |
| 33    | 14177 NBR         | 14177 NBR         | 14177 NBR         | 14177 NBR        | O-Ring, Filler Cap - 70D                                      | 1   |
| 37    | 92241             | 92241             | 92241             | 92241            | Gauge, Oil, Bubble w/Gasket - 80D                             | 1   |
| 38    | 44428 NBR         | 44428 NBR         | 44428 NBR         | 44428 NBR        | Gasket, Flat, Oil Gauge - 80D                                 | 1   |
| 40    | 92520 STZP        | 92520 STZP        | 92520 STZP        | 92520 STZP       | Screw, Sems HHC (M6x20)                                       | 4   |
| 48    | 25625 STCP        | 25625 STCP        | 25625 STCP        | 25625 STCP       | Plug, Drain (1/4"x19BSP)                                      | 1   |
| 49    | 23170 NBR         | 23170 NBR         | 23170 NBR         | 23170 NBR        | O-Ring, Drain Plug - 70D                                      | 1   |
| 50    | 46509 AL          | 46509 AL          | 46509 AL          | 46509 AL         | Cover, Rear                                                   | 1   |
| 51    | 44836 NBR         | 44836 NBR         | 44836 NBR         | 44836 NBR        | O-Ring, Rear Cover - 70D                                      | 1   |
| ● 53  | 45361 AL          | 45361 AL          | 45361 AL          | 45361 AL         | Crankcase (M10)                                               | 1 ● |
| 56    | 43240 POP         | 43240 POP         | 43240 POP         | 43240 POP        | Pan, Oil                                                      | 1   |
| 64    | 43237 CM          | 43237 CM          | 43237 CM          | 43237 CM         | Pin, Crosshead                                                | 3   |
| 65    | 44234 ZZCP        | 44234 ZZCP        | 44234 ZZCP        | 44234 ZZCP       | Rod, Plunger                                                  | 3   |
| 69    | 43227 STZP        | 43227 STZP        | 43227 STZP        | 43227 STZP       | Washer, Oil Seal                                              | 3   |
| 70    | 43228 NBR         | 43228 NBR         | 43228 NBR         | 43228 NBR        | Seal, Oil, Crankcase                                          | 3   |
| 75    | 43328 S           | 43328 S           | 43328 S           | 43328 S          | Slinger, Barrier                                              | 3   |
| 88    | 45697 S           | 45697 S           | 45697 S           | 45697 S          | Washer, Keyhole (M18)                                         | 3   |
| 90    | <b>43311 CC</b>   | <b>43311 CC</b>   | —                 | —                | Plunger (M16x77)                                              | 3   |
| 95    | 89649 STZP        | 89649 STZP        | 89649 STZP        | 89649 STZP       | Plunger (M18x77)                                              | 3   |
| 96    | 43235 PTFE        | 43235 PTFE        | 43235 PTFE        | 43235 PTFE       | Stud, Plunger Retainer (M6x70)                                | 3   |
| 97    | 17399 NBR         | 17399 NBR         | 17399 NBR         | 17399 NBR        | Back-up-Ring, Plunger Retainer                                | 3   |
|       | 14160 FPM         | 14160 FPM         | 14160 FPM         | 14160 FPM        | O-Ring, Plunger Retainer - 80D                                | 3   |
| 98    | 45891 CU          | 45891 CU          | 45891 CU          | 45891 CU         | O-Ring, Plunger Retainer - 80D                                | 3   |
| 99    | 46504 S           | 46504 S           | 46504 S           | 46504 S          | Gasket, Plunger Retainer                                      | 3   |
| 100   | 45687 PVDF        | 45687 PVDF        | 45687 PVDF        | 45687 PVDF       | Retainer, Plunger (M5)                                        | 3   |
|       | 45686 PVDF        | 45686 PVDF        | 45686 PVDF        | 45686 PVDF       | Retainer, Seal, Front                                         | 3   |
| 101   | <b>43313</b>      | <b>43313</b>      | <b>43239</b>      | <b>43239</b>     | Retainer, Seal, Rear                                          | 3   |
| 106   | <b>43316 NBR</b>  | <b>43316 NBR</b>  | <b>43243 NBR</b>  | <b>43243 NBR</b> | Wick, Long Tab                                                | 3   |
|       | <b>106660 FPM</b> | <b>106660 FPM</b> | <b>44926 FPM</b>  | <b>44926 FPM</b> | Seal, LPS w/S-Spg                                             | 3   |
| 120   | <b>45684 BB</b>   | <b>45684 BB</b>   | <b>45683 BB</b>   | <b>45683 BB</b>  | Seal, LPS w/S-Spg                                             | 3   |
| 121   | 20285 NBR         | 20285 NBR         | 20285 NBR         | 20285 NBR        | Case, Seal                                                    | 3   |
|       | 11693 FPM         | 11693 FPM         | 11693 FPM         | 11693 FPM        | O-Ring, Seal Case - 70D                                       | 3   |
| 125   | —                 | —                 | <b>43245 SNG</b>  | <b>43245 SNG</b> | O-Ring, Seal Case                                             | 3   |
|       | —                 | —                 | <b>44925 FPM</b>  | <b>44925 FPM</b> | Seal, HPS w/S                                                 | 3   |
| 126   | <b>43320 BB</b>   | <b>43320 BB</b>   | —                 | —                | Seal, HPS w/SS                                                | 3   |
| 127   | <b>43319 PTFE</b> | <b>43319 PTFE</b> | —                 | —                | Adapter, Female                                               | 3   |
|       | <b>46287 HT</b>   | <b>46287 HT</b>   | —                 | —                | V-Packing                                                     | 6   |
| 128   | <b>43318 BB</b>   | <b>43318 BB</b>   | —                 | —                | V-Packing                                                     | 6   |
| 139   | <b>43448 BB</b>   | <b>43448 BB</b>   | <b>43448 BB</b>   | <b>43448 BB</b>  | Adapter, Male                                                 | 3   |
| 162   | 43248 PTFE        | 43248 PTFE        | 43248 PTFE        | 43248 PTFE       | Plug, Inlet (1/2" NPT)                                        | 1   |
| 163   | 43249 NBR         | 43249 NBR         | 43249 NBR         | 43249 NBR        | Back-up-Ring, Valve Seat                                      | 6   |
|       | <b>44383 FPM</b>  | <b>44383 FPM</b>  | <b>44383 FPM</b>  | <b>44383 FPM</b> | O-Ring, Valve Seat - 70D                                      | 6   |
| 164   | 43722 S           | 43722 S           | 43722 S           | 43722 S          | O-Ring, Valve Seat - 70D                                      | 6   |
|       | <b>43825 S</b>    | —                 | <b>43825 S</b>    | <b>43825 S</b>   | Seat - Q.V.                                                   | 6   |
| 166   | 43721 S           | 43721 S           | 43721 S           | 43721 S          | Seat - F.V.                                                   | 6   |
|       | <b>43824 S</b>    | —                 | <b>43824 S</b>    | <b>43824 S</b>   | Valve - Q.V.                                                  | 6   |
| 167   | 43751 S           | 43751 S           | 43751 S           | 43751 S          | Valve - F.V.                                                  | 6   |
|       | <b>43823 S</b>    | —                 | <b>43823 S</b>    | <b>43823 S</b>   | Spring - Q.V.                                                 | 6   |
| 168   | 44564 PVDF        | 44564 PVDF        | 44564 PVDF        | 44564 PVDF       | Spring - F.V.                                                 | 6   |
| 172   | 17617 NBR         | 17617 NBR         | 17617 NBR         | 17617 NBR        | Retainer, Spring                                              | 6   |
|       | 11691 FPM         | 11691 FPM         | 11691 FPM         | 11691 FPM        | O-Ring, Valve Plug - 90D                                      | 6   |
| 174   | 43850 BB          | 43850 BB          | 43850 BB          | 43850 BB         | O-Ring, Valve Plug - 90D                                      | 6   |
| 185   | <b>45549 FBB</b>  | <b>45549 FBB</b>  | <b>45419 FBB</b>  | <b>45419 FBB</b> | Plug, Valve                                                   | 6   |
| 187   | 46868 S           | 46868 S           | 46868 S           | 46868 S          | Head, Manifold                                                | 1   |
| 194   | 45550 STZP        | 45550 STZP        | 45550 STZP        | 45550 STZP       | Stud, Manifold (M10x35)                                       | 4   |
| 255   | 30243 STZP        | 30243 STZP        | 30243 STZP        | 30243 STZP       | Nut, Flanged (M10)                                            | 4   |
| 260   | 30611 STZP        | 30611 STZP        | 30611 STZP        | 30611 STZP       | Kit, Direct Mount                                             | 1   |
|       | —                 | <b>30645 STZP</b> | <b>30645 STZP</b> | —                | Assy, Angle Rail, B, U.S. (Incls: 28499, 30900, 30910, 30920) | 1   |
| 265   | 30660             | 30660             | 30660             | 30660            | Assy, Angle Rail, A, U.S. (Incls: 30635, 30900, 30910, 30920) | 1   |
| ● 269 | 30206 F           | 30206 F           | 30206 F           | 30206 F          | Kit, Mounting (Incls: 30645, 30206, 33000, 30067, 43256)      | 1   |
|       |                   |                   |                   |                  | Pulley (10") [See Drive Packages Tech Bulletin 003]           | 1 ● |

# EXPLODED VIEW



Models  
53, 55, 51, 58  
February 2002

|       | <b>51 MATL</b>   | <b>55 MATL</b>   | <b>53 MATL</b>   | <b>58 MATL</b>   |                                                                                                                   |     |
|-------|------------------|------------------|------------------|------------------|-------------------------------------------------------------------------------------------------------------------|-----|
| ● 274 | 33000 STL        | 33000 STL        | 33000 STL        | 33000 STL        | Hub, "H", M24 (Keyway M8)                                                                                         | 1 ● |
|       |                  |                  |                  |                  | <b>[See Drive Packages Tech Bulletin 03]</b>                                                                      |     |
| ● 283 | 34334            | 34334            | 34334            | 34334            | Kit, Oil Drain                                                                                                    | 1 ● |
| ● 299 | <b>816820 BB</b> | <b>816820 BB</b> | <b>814521 BB</b> | <b>814521 BB</b> | Head, Complete                                                                                                    | 1 ● |
| 300   | <b>30610 NBR</b> | <b>30610 NBR</b> | <b>30488 NBR</b> | <b>30488 NBR</b> | Kit, Seal (Incls: 97,101,106,121,125 or 27)                                                                       | 1   |
| 310   | 30820 NBR        | 30820 NBR        | 30820 NBR        | 30820 NBR        | Kit, Valve - Q.V. (Incls: 162-164,166,167,168,172)                                                                | 2   |
|       | 31820 NBR        | 31820 NBR        | 31820 NBR        | 31820 NBR        | Kit, Valve - F.V. (Incls: 162-164,166,167,168,172)                                                                | 2   |
| 350   | 30696 STZP       | 30696 STZP       | 30696 STZP       | 30696 STZP       | Plier, Reverse                                                                                                    | 1   |
| 351   | 43257 STZP       | 43257 STZP       | 43257 STZP       | 43257 STZP       | Tool, Seal Case Removal                                                                                           | 1   |
|       | 33005 STZP       | 33005 STZP       | 33005 STZP       | 33005 STZP       | Tool, Seal Case Socket (1/2" Drive)                                                                               | 1   |
| 352   | 44050 STZP       | 44050 STZP       | 44050 STZP       | 44050 STZP       | Tool, Oil Gauge Removal                                                                                           | 1   |
| —     | 6565.1           | 6565.1           | 6565.1           | 6565.1           | Plunger Pump Service Video - 5, 7, 15 PFR Pumps                                                                   | 1   |
| —     | 6107             | 6107             | 6107             | 6107             | Oil, Bottle (21 oz.) ISO 68 Multi-Viscosity Hydraulic<br>(Fill to specified crankcase capacity prior to start-up) | 1   |

● Industrial discount. **Bold print part numbers are unique to a particular pump model.** *Italics are optional items.*

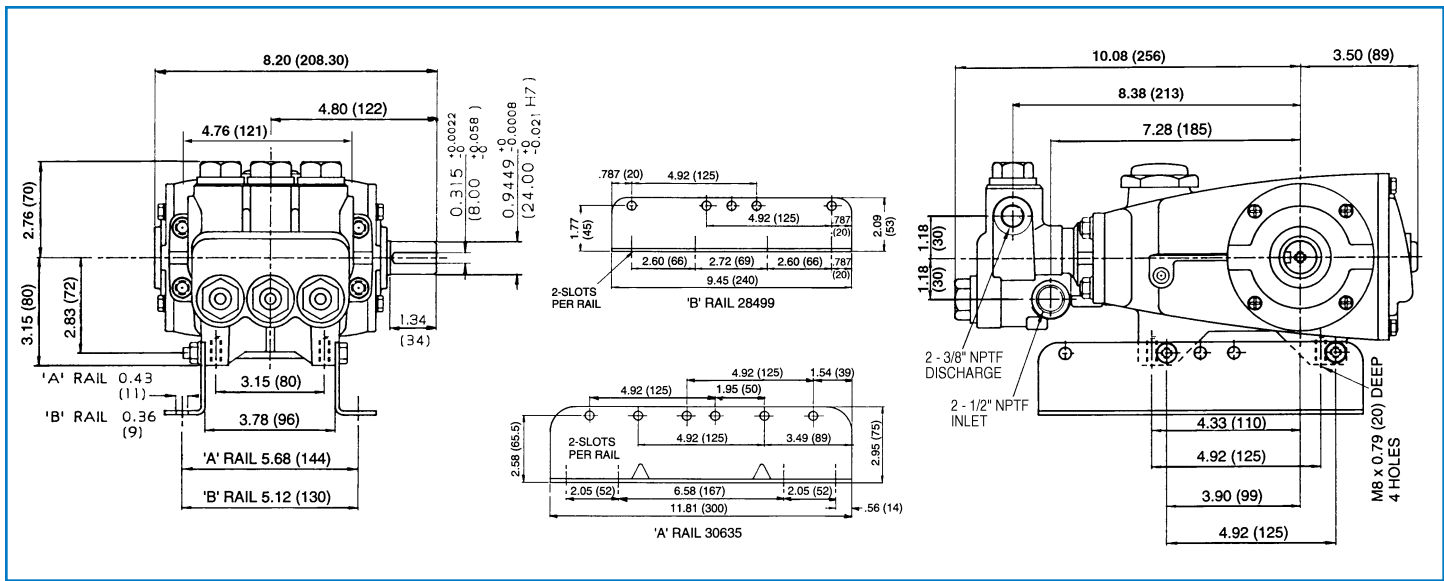
See Tech Bulletins 003, 024, 035, 036, 043, 074, 077 and 083 for additional information. See 8051-8078 Gearbox Specification Sheet for direct drive Gas Engine option.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum ABS=ABS Plastic BB=Brass CC=Ceramic CM=Chrome-Moly CU=Copper F=Cast Iron

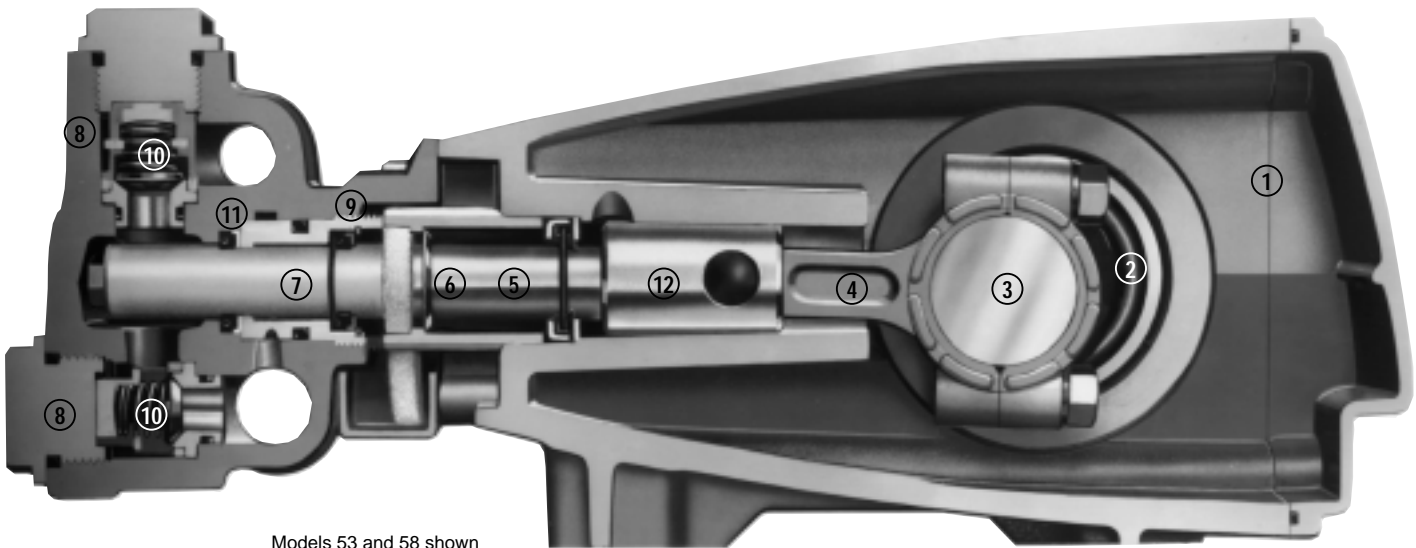
FBB=Forged Brass FBR=Fiber FCM=Forged Chrome-moly FPM=Fluorocarbon (Viton®) HS=High Strength HT=Hi-Temp (EPDM Alternative)

NBR=Medium Nitrile (Buna-N) POP=Polypropylene PTFE=Pure Teflon® PVDF=Fluoroplastic (High Strength) RTP=Reinforced Composite S=304SS

SNG=Special Blend (Buna) STCP=Steel/Chrome Plated STL=Steel STZP=Steel/Zinc Plated ZZCP=Chrome Plated/Steel-Zamak



Models 53, 55, 51, 58



Models 53 and 58 shown

- 1 Die cast aluminum **crankcase** means high strength, lightweight, and excellent tolerance control.
- 2 Oversized crankshaft **bearings** provide extended bearing life and pump performance.
- 3 Chrome-moly **crankshaft** provides unmatched strength and surface hardness for long life.
- 4 Matched oversized high strength **connecting rods** for superior strength and bearing quality.
- 5 Special high strength **plunger rods** with ZAMAK crossheads for longevity and corrosion resistance.
- 6 The stainless steel **slinger** provides back-up protection for the crankcase seal, keeping pumped liquids out of the crankcase.
- 7 Special concentric, high density, polished, graphite impregnated, solid ceramic **plungers** are abrasion resistant and result in extended seal life.
- 8 **Manifolds** are a high tensile strength forged brass for long term, continuous duty.
- 9 100% wet **seal** design adds to service life by allowing pumped liquids to cool and lubricate on both sides.
- 10 Stainless steel **valves, seats and springs** provide corrosion-resistance, positive seating and long life.
- 11 Specially formulated, CAT PUMP exclusive, **Hi-Pressure Seals or V-Packings** offer unmatched performance and seal life.
- 12 **Crossheads** are 360° supported for uncompromising alignment.

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

**World Headquarters**  
**CAT PUMPS**  
 1681 - 94th Lane N.E. Minneapolis, MN 55449-4324  
 Phone (763) 780-5440 — FAX (763) 780-2958  
 e-mail: sales@catpumps.com  
 www.catpumps.com

**International Inquiries**  
 FAX (763) 785-4329  
 e-mail: intlsales@catpumps.com



*"The World's Most Dependable Pumps"*

**CAT PUMPS (U.K.) LTD.**  
 1 Fleet Business Park, Sandy Lane, Church Crookham, Fleet  
 Hampshire GU52 8BF, England  
 Phone Fleet 44 1252-622031 — Fax 44 1252-626655  
 e-mail: sales@catpumps.co.uk

**N.V. CAT PUMPS INTERNATIONAL S.A.**  
 Heiveldekens 6A, 2550 Kontich, Belgium  
 Phone 32-3-450.71.50 — Fax 32-3-450.71.51  
 e-mail: cpi@catpumps.be www.catpumps.be

**CAT PUMPS DEUTSCHLAND GmbH**  
 Buchwiese 2, D-65510 Idstein, Germany  
 Phone 49 6126-9303 0 — Fax 49 6126-9303 33  
 e-mail: catpumps@t-online.de www.catpumps.de