

Model 6775 Shown
(Shaft protection and rails sold with pump)

60 Frame Plunger Pump

**Standard Brass
Model**

6775

**Stainless Steel
Model**

6771

**Nickel Aluminum
Bronze Model**

6777

FEATURES

- Triplex plunger design delivers high efficiency and low pulsation.
- Durable dual V-Packings are lubricated and cooled by pumped liquid.
- Pre-set Lo-Pressure Seals provide secondary protection against external leaks and require no packing adjustment.
- Special high-density, polished, concentric plungers provide a true wear surface and extended seal life.
- Specially formulated Seals and V-Packings offer unmatched performance and extended life.
- Guided valve design for extended valve life.
- Wet-end easily serviced without entering crankcase.

SPECIFICATIONS

| | U.S. Measure | Metric Measure |
|--|------------------------|----------------------|
| Flow | 75 gpm | (284 l/m) |
| Pressure Range | 100 to 1200 psi | (7 to 85 bar) |
| Inlet Pressure Range | Flooded to 50 psi | (Flooded to 3.5 bar) |
| RPM..... | 650 rpm | (650 rpm) |
| Bore | 2.165" | (55 mm) |
| Stroke | 2.579" | (65.5 mm) |
| Crankcase Capacity | 10 Qts. | (9.46 l) |
| Max. Liquid Temperature | 140°F | (60°C) |
| Above 130°F call CAT PUMPS for inlet conditions and elastomer recommendations. | | |
| Inlet Ports (2) | 2" NPTF | (2" NPTF) |
| Discharge Ports (2) | 1-1/4" NPTF | (1-1/4" NPTF) |
| Shaft Diameter..... | 1.772" | (45 mm) |
| Weight | | |
| 6775 | 356 lbs. | (161 kg) |
| 6771 | 353 lbs. | (160 kg) |
| 6777 | 327 lbs. | (148 kg) |
| Dimensions | | |
| 6775, 6777..... | 31.14 x 24.37 x 12.87" | (791 x 619 x 327 mm) |
| 6771..... | 30.71 x 24.37 x 12.44" | (780 x 619 x 316 mm) |

ELECTRIC HORSEPOWER REQUIREMENTS

| FLOW | | PRESSURE | | | RPM |
|-------------|-----|------------|-------------|-------------|-----|
| | | psi 900 | psi 1000 | psi 1200 | |
| U.S. gpm | l/m | bar 60 | bar 70 | bar 85 | |
| 75 | 284 | 46.2 | 51.4 | 61.6 | 650 |
| 70 | 265 | 43.2 | 47.9 | 57.5 | 607 |
| 60 | 227 | 37.0 | 41.1 | 49.3 | 520 |
| 50 | 189 | 30.8 | 34.2 | 41.1 | 433 |

| | | | |
|--|--|---|---|
| DETERMINING THE PUMP rpm | Rated gpm ----- Rated rpm | = | "Desired" gpm ----- "Desired" rpm |
| DETERMINING THE REQUIRED H.P. | gpm x psi ----- 1460 | = | Electric Brake H. P. Required |
| DETERMINING MOTOR PULLEY SIZE | Motor Pulley O.D. ----- Pump rpm | = | Pump Pulley O.D. ----- Motor rpm |

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

⚠ 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 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

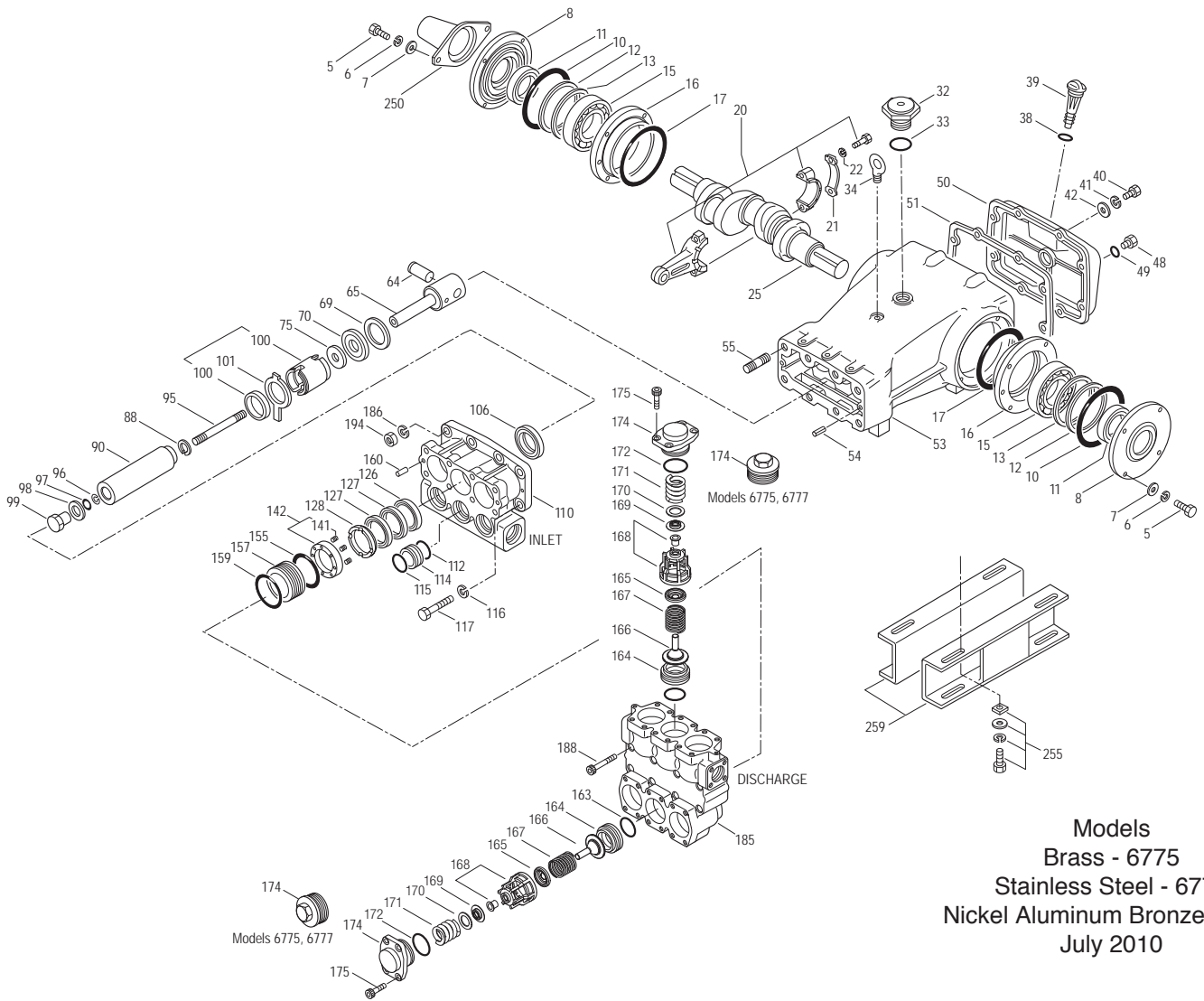
View the Limited Warranty on-line at www.catpumps.com/warranty.

"Customer confidence is our greatest asset"

PARTS LIST

| ITEM | PART NUMBER | | | | | | DESCRIPTION | QTY |
|------|---------------|---------------|---------------|-----------|---------------|------------|--|-----|
| | 6775 | MATL | 6771 | MATL | 6777 | MATL | | |
| 2 | 43048 | STL | 43048 | STL | 43048 | STL | Key (M14x9x90) | 1 |
| 5 | 126532 | STCP R | 89728 | S | 89728 | S | Screw, HH (M10 x 40) | 8 |
| 6 | 126231 | STCP R | 15847 | S | 15847 | S | Lockwasher (M10) | 8 |
| 7 | 126574 | STZP R | 19934 | S | 19934 | S | Washer, Flat (M10) | 8 |
| 8 | 29443 | AL | 29443 | AL | 29443 | AL | Cover, Bearing, Outer | 2 |
| 10 | 29444 | NBR | 29444 | NBR | 29444 | NBR | O-Ring Outer, Bearing Cover - 70D | 2 |
| 11 | 11443 | NBR | 11443 | NBR | 11443 | NBR | Seal, Oil, Crankshaft - 70D | 2 |
| 12 | 43642 | STZP R | 43642 | STZP R | 43642 | STZP R | Washer, Shim (M120 x 0.3) | 0-2 |
| | 126594 | STCP R | 126594 | STCP R | 126594 | STCP R | Washer, Shim (M120 x 0.3) | 0-2 |
| 13 | 126595 | STCP R | 126595 | STCP R | 126595 | STCP R | Washer, Shim (M120 x 0.5) | 0-2 |
| 15 | 29441 | STL | 29441 | STL | 29441 | STL | Bearing, Roller | 2 |
| 16 | 29442 | STL | 29442 | STL | 29442 | STL | Cover, Bearing, Inner | 2 |
| 17 | 29444 | NBR | 29444 | NBR | 29444 | NBR | O-Ring Inner, Bearing Cover - 70D | 2 |
| 20 | 126612 | BBHS | 126612 | BBHS | 126612 | BBHS | Rod, Connecting (Includes: 21, 22) | 3 |
| 21 | 126560 | STCP R | 126560 | STCP R | 126560 | STCP R | Washer, Locking | 3 |
| 22 | 126593 | STCP R | 126593 | STCP R | 126593 | STCP R | Washer, Shim (M10.5 x 1.5) | 6 |
| 25 | 29440 | FCM | 29440 | FCM | 29440 | FCM | Crankshaft, Dual End | 1 |
| 31 | 828710 | PE | 828710 | PE | 828710 | PE | Protector, Oil Cap w/Foam Gasket | 1 |
| 32 | 43211 | ABS | 43211 | ABS | 43211 | ABS | Cap, Oil Filler | 1 |
| 33 | 14177 | NBR | 14177 | NBR | 14177 | NBR | O-Ring, Oil Filler Cap - 70D | 1 |
| 34 | 126743 | STCP R | 126743 | STCP R | 126743 | STCP R | Bolt, Eye (M12) (For Lifting Pump Only) | 1 |
| 38 | 129313 | RBR | 129313 | RBR | 129313 | RBR | Gasket, Flat | 1 |
| 39 | 27769 | ABS | 27769 | ABS | 27769 | ABS | Stick, Dip | 1 |
| 40 | 126531 | STCP R | 89627 | S | 89627 | S | Screw, HH (M10 x 30) | 8 |
| 41 | 126231 | STZP R | 15847 | S | 15847 | S | Lockwasher (M10) | 8 |
| 42 | 126574 | STCP R | 19934 | S | 19934 | S | Washer, Flat (M10) | 8 |
| 48 | 25625 | STCP | 25625 | STCP | 25625 | STCP | Plug, Drain (1/4 x 19BSP) | 1 |
| 49 | 23170 | NBR | 23170 | NBR | 23170 | NBR | O-Ring, Drain Plug - 70D | 1 |
| 50 | 29438 | AL | 29438 | AL | 29438 | AL | Cover, Rear | 1 |
| 51 | 129386 | NBR | 129386 | NBR | 129386 | NBR | Gasket, Rear Cover | 1 |
| 53 | 45303 | AL | 45303 | AL | 45303 | AL | Crankcase w/Guide Pins (Includes: 34, 54) | 1 |
| 54 | 43282 | S | 43282 | S | 43282 | S | Pin, Guide | 2 |
| 55 | 126553 | STCP R | 89615 | S | 89615 | S | Stud (M16 x 70) | 2 |
| 64 | 29481 | CM | 29481 | CM | 29481 | CM | Pin, Crosshead | 3 |
| 65 | † 45384 | SSZZ | 45384 | SSZZ | 45384 | SSZZ | Rod, Plunger | 3 |
| 69 | 126588 | STCP R | 126588 | STCP R | 126588 | STCP R | Washer, Oil Seal | 3 |
| 70 | 29454 | NBR | 29454 | NBR | 29454 | NBR | Seal, Oil - 80D | 3 |
| 75 | 44752 | NBR | 44752 | NBR | 44752 | NBR | Slinger, Barrier - 85D | 3 |
| 88 | 45677 | SS | 45677 | SS | 45677 | SS | Washers, Keyhole (M14) | 3 |
| 90 | 44749 | CC | 44749 | CC | 44749 | CC | Plunger (M55 x 185) | 3 |
| 95 | 89783 | S | 44748 | SS | 44748 | SS | Stud, Plunger Retainer (M14 x 147) | 3 |
| 96 | 20214 | PTFE | 20214 | PTFE | 20214 | PTFE | Back-up-Ring, Plunger Retainer | 3 |
| 97 | 17616 | NBR | 17616 | NBR | 17616 | NBR | O-Ring, Plunger Retainer - 80D | 3 |
| | 11686 | FPM | 11686 | FPM | 11686 | FPM | O-Ring, Plunger Retainer - 80D | 3 |
| | ◆ 703369 | EPDM | ◆ 703369 | EPDM | ◆ 703369 | EPDM | O-Ring, Plunger Retainer - 70D | 3 |
| 99 | 45276 | S | 44750 | SS | 44750 | SS | Retainer, Plunger (M14) | 3 |
| 100 | 855000 | PVDF | 855000 | PVDF | 855000 | PVDF | Retainer, Seal, 2-pc (See Tech Bulletin 105) | 3 |
| 101 | 44762 | — | 44762 | — | 44762 | — | Wick, Long Tab (M55 x 185) | 3 |
| 106 | 44757 | NBR | 44757 | NBR | 44757 | NBR | Seal, LPS w/SS-Spg | 3 |
| | 45882 | FPM | 45882 | FPM | 45882 | FPM | Seal, LPS w/SS-Spg | 3 |
| | 702228 | SFTB | 702228 | SFTB | 702228 | SFTB | Seal, LPS w/SS-Spg | 3 |
| 110 | 49457 | NABC | 45769 | SS | 44754 | NAB | Manifold, Inlet | 1 |
| 112 | 18175 | NBR | 18175 | NBR | 18175 | NBR | O-Ring, Spacer, Inner - 80D | 3 |
| | 13266 | FPM | 13266 | FPM | 13266 | FPM | O-Ring, Spacer, Inner - 70D | 3 |
| | ◆ 702442 | EPDM | ◆ 702442 | EPDM | ◆ 702442 | EPDM | O-Ring, Spacer, Inner - 75D | 3 |
| 114 | 44767 | SS | 44767 | SS | 44767 | SS | Spacer, Inlet Manifold | 3 |
| 115 | 18175 | NBR | 18175 | NBR | 18175 | NBR | O-Ring, Spacer, Outer - 80D | 3 |
| | 13266 | FPM | 13266 | FPM | 13266 | FPM | O-Ring, Spacer, Outer - 70D | 3 |
| | ◆ 702442 | EPDM | ◆ 702442 | EPDM | ◆ 702442 | EPDM | O-Ring, Spacer, Outer - 75D | 3 |
| 116 | 126569 | STCP R | 19086 | S | 19086 | S | Lockwasher (M16) | 4 |
| 117 | 126537 | STCP R | 89729 | S | 89729 | S | Screw, HH (M16 x 55) | 4 |
| 126 | 48392 | D | 48392 | D | 48392 | D | Adapter, Female (See Tech Bulletin 087) | 3 |
| | 45771 | SS | 45771 | SS | 45771 | SS | Adapter, Female | 3 |
| 127 | 44764 | STG* | 44764 | STG* | 44764 | STG* | V-Packing | 6 |
| 128 | 45772 | SS | 45772 | SS | 45772 | SS | Adapter, Male | 3 |
| 141 | 44943 | SS | 44943 | SS | 44943 | SS | Coil Spring, Spacer | 24 |
| 142 | 48501 | BB | 45383 | SS | 45383 | SS | Spacer w/Coil Springs | 3 |
| 155 | 18178 | NBR | 18178 | NBR | 18178 | NBR | O-Ring, Spacer - 80D | 3 |
| | 13338 | FPM | 13338 | FPM | 13338 | FPM | O-Ring, Spacer - 70D | 3 |
| | ◆ 701657 | EPDM | ◆ 701657 | EPDM | ◆ 701657 | EPDM | O-Ring, Spacer - 70D | 3 |
| 157 | 45321 | SS | 45321 | SS | 45321 | SS | Spacer, V-Packing | 3 |
| 159 | 18178 | NBR | 18178 | NBR | 18178 | NBR | O-Ring, Spacer - 80D | 3 |
| | 13338 | FPM | 13338 | FPM | 13338 | FPM | O-Ring, Spacer - 70D | 3 |
| | ◆ 701657 | EPDM | ◆ 701657 | EPDM | ◆ 701657 | EPDM | O-Ring, Spacer - 70D | 3 |
| 160 | 44756 | S | 44756 | S | 44756 | S | Pin, Guide | 2 |
| 163 | 18176 | NBR | 18176 | NBR | 18176 | NBR | O-Ring, Seat - 80D | 6 |
| | 13278 | FPM | 13278 | FPM | 13278 | FPM | O-Ring, Seat | 6 |
| | ◆ 702445 | EPDM | ◆ 702445 | EPDM | ◆ 702445 | EPDM | O-Ring, Seat - 70D | 6 |
| 164 | † 44772 | SS | 44772 | SS | 44772 | SS | Seat | 6 |
| 165 | 76304 | SS | 76304 | SS | 76304 | SS | Guide, Spring | 6 |
| 166 | 76319 | SS | 76319 | SS | 76319 | SS | Valve, Guided, QV | 6 |
| 167 | 76309 | SS | 76309 | SS | 76309 | SS | Spring | 6 |
| 168 | 76349 | PVDF | 76349 | PVDF | 76349 | PVDF | Retainer, Spring | 6 |
| 169 | 76306 | SS | 76306 | SS | 76306 | SS | Retainer, Bushing | 6 |
| 170 | † 44776 | SS | 44776 | SS | 44776 | SS | Washer, Retainer | 6 |
| 171 | 44780 | SS | 44780 | SS | 44780 | SS | Spring, Coil, Valve Plug | 6 |
| 172 | 18177 | NBR | 18177 | NBR | 18177 | NBR | O-Ring, Valve Plug - 80D | 6 |
| | 13279 | FPM | 13279 | FPM | 13279 | FPM | O-Ring, Valve Plug - 70D | 6 |
| | ◆ 701988 | EPDM | ◆ 701988 | EPDM | ◆ 701988 | EPDM | O-Ring, Valve Plug | 6 |
| 174 | 49461 | NABC | 48572 | SS | 44778 | NAB | Plug, Valve [3/00] | 1 |
| 175 | — | — | 48573 | S | — | — | Screw, HSH (M16x35) [3/00] | 24 |
| 185 | 49459 | NABC | 48489 | SS | 44769 | NAB | Manifold, Discharge [3/00] | 1 |
| 186 | 126569 | STCP R | 19086 | S | 19086 | S | Lockwasher (M16) | 2 |
| 188 | 126744 | STCP R | 89694 | S | 89694 | S | Screw, HSH (M16 x 110) | 8 |
| 194 | 126525 | STCP R | 81291 | S | 81291 | S | Nut, Hex (M16) | 2 |
| 250 | 29445 | AL | 29445 | AL | 29445 | AL | Protector, Shaft | 1 |
| 255 | 33243 | STZP | 33243 | STZP | 33243 | STZP | Kit, Mount (Included w/Pump) | 1 |

EXPLODED VIEW



Models
 Brass - 6775
 Stainless Steel - 6771
 Nickel Aluminum Bronze - 6777
 July 2010

| ITEM | PART NUMBER | | | | DESCRIPTION | QTY | | |
|------|---------------|-------------|---------------|-----------|---------------|------------|--|------|
| | 6775 | MATL | 6771 | MATL | | | 6777 | MATL |
| 259 | 29477 | STZP | 29477 | STZP | 29477 | STZP | Rail (Included w/Pump) (Two per pump required) | 2 |
| 275 | 990014 | STL | 990014 | STL | 990014 | STL | Hub, 45mm (M14x9 Keyway) [See Drive Packages, Tech Bulletin 003] (not shown) | 1 |
| 279 | 30429 | STZP | 30429 | STZP | 30429 | STZP | Oiler (10 oz.) (Not Shown) | 3 |
| 281 | 30969 | — | 30969 | — | 30969 | — | Oiler, Glass (10 oz.) (Not Shown) | 3 |
| 282 | 10070 | NBR | 10070 | NBR | 10070 | NBR | Gasket, Oiler (Not Shown) | 3 |
| 283 | 34314 | — | 34314 | — | 34314 | — | Kit, Oil Drain (3/8" x 48") | 1 |
| 290 | 6124 | — | 6124 | — | 6124 | — | Gasket, Liquid (3.0 oz.) | 1 |
| 299 | 996760 | BBCP | 996667 | SS | 994820 | NAB | Head, Complete | 1 |
| 300 | 34091 | NBR* | 34091 | NBR* | 34091 | NBR* | Kit, Seal (Includes: 97,106,112,115,127,155,159) | 1 |
| | 34093 | FPM* | 34093 | FPM* | 34093 | FPM* | Kit, Seal (Includes: 97,106,112,115,127,155,159) | 1 |
| | ♦ 76091 | EPDM | ♦ 76091 | EPDM | ♦ 76091 | EPDM | Kit, Seal (Includes: 97,106,112,115,127,155,159) | 1 |
| 310 | 76140 | NBR | 76140 | NBR | 76140 | NBR | Kit, Valve (Includes: 163,164,165,166,167,168,169,170,172) | 2 |
| | 76145 | FPM | 76145 | FPM | 76145 | FPM | Kit, Valve (Includes: 163,164,165,166,167,168,169,170,172) | 2 |
| | ♦ 76240 | EPDM | ♦ 76240 | EPDM | ♦ 76240 | EPDM | Kit, Valve (Includes: 163,164,165,166,167,168,169,170,172) | 2 |
| — | 819010 | F | 819010 | F | 819010 | F | Assy, Crankcase, Cast Iron Conversion | 1 |
| — | 88902 | STZP | 88902 | STZP | 88902 | STZP | Stud (M16x277) (For removing D.M., I.M.) (not shown) | 2 |
| 390 | ^ 717500 | SS | ^ 717500 | SS | ^ 717500 | SS | C.A.T. (Inlet pressure stabilizer for RO and boosted inlet applications) (not shown) | 1 |
| 391 | ^ 717508 | SS | ^ 717508 | SS | ^ 717508 | SS | Adapters (2 per C.A.T.) (See Data Sheet for complete selection) (not shown) | 2 |
| 392 | ^ 701833 | SS | ^ 701833 | SS | ^ 701833 | SS | Elbow Assy used with Adapter Assy 717508 (not shown) | 1 |
| — | 6575 | — | 6575 | — | 6575 | — | Plunger Pump Service DVD | 1 |
| — | 6105 | — | 6105 | — | 6105 | — | Oil, Twin Pack (Two 2.5 Gal) ISO-68 Hydraulic (Fill to specified crankcase capacity prior to start-up) | 1 |
| — | — | — | 6119 | — | — | — | Lubricant, Antiseize (1 oz.) (See Tech Bulletin 095) | 1 |

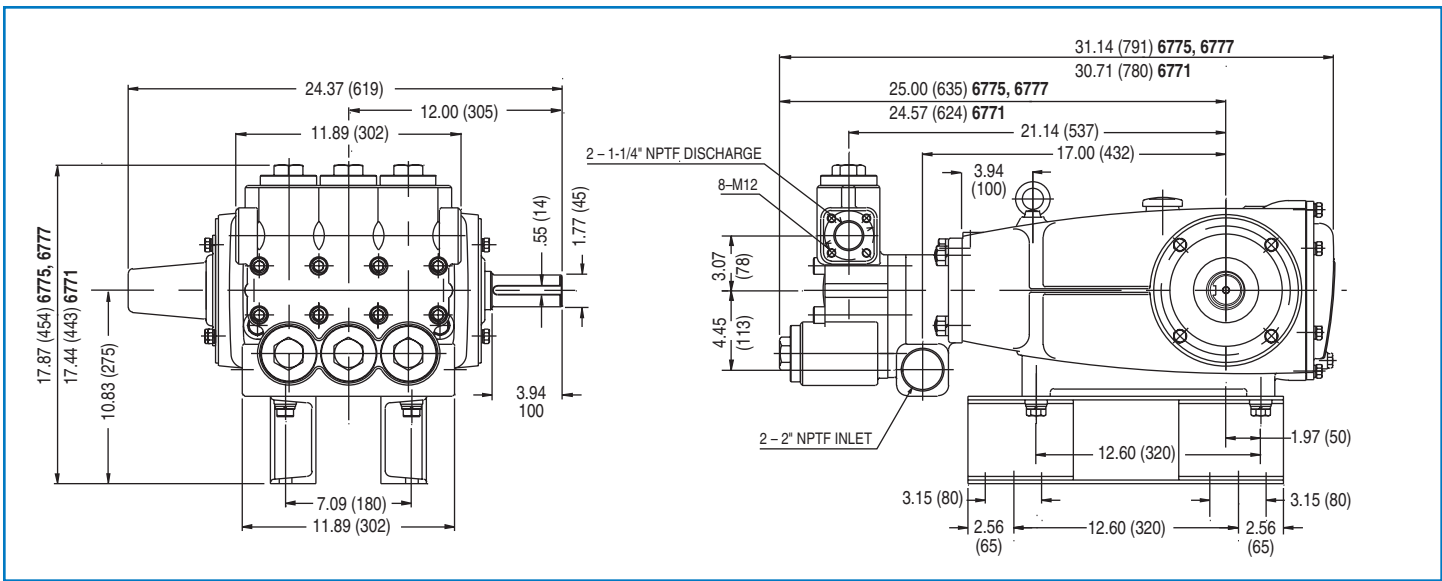
Bold print part numbers are unique to a particular pump model.
Italics are optional items.

- [] Date of latest production change.
- † Production parts different from replacement parts.
- R Components comply with RoHS Directive.
- * Review material codes for individual items (STG generally may be used as alternate).
- ^ **C.A.T. highly recommended for pressurized inlet, R.O. and Industrial applications.**

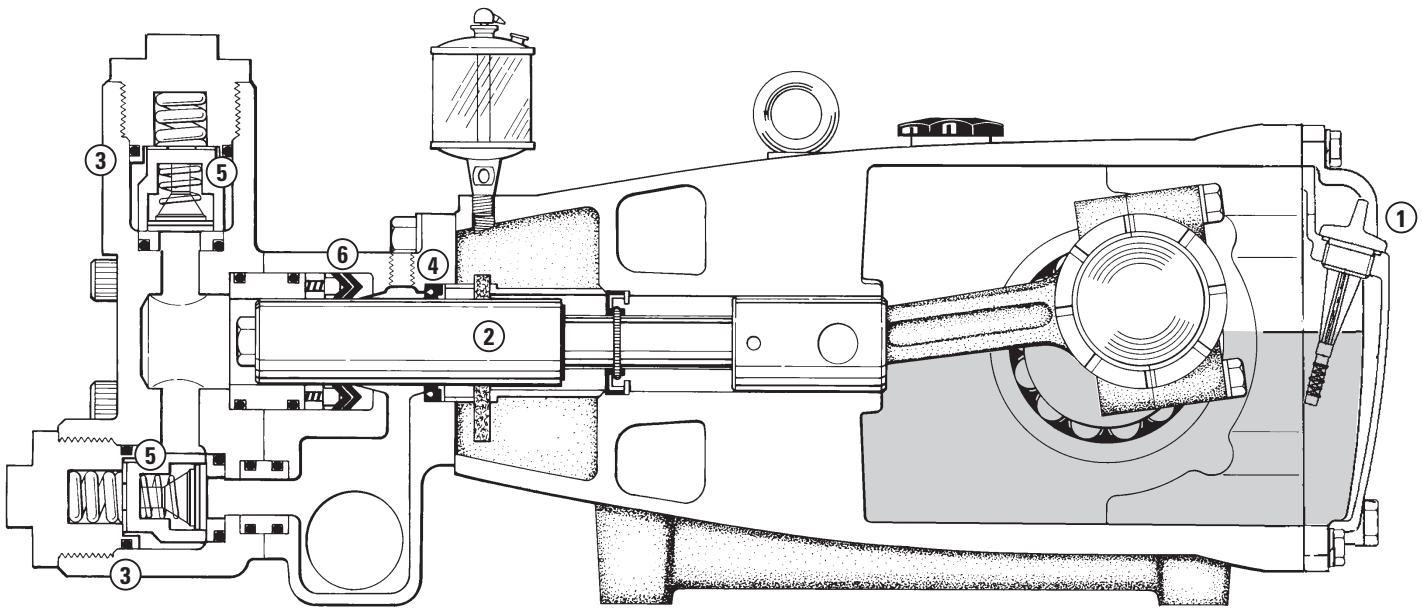
♦ Silicone oil/grease required

View Tech Bulletins 003, 024, 036, 043, 052, 053, 054, 064, 074, 077, 083, 084, 087, 095 and 105 for additional information.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum
 BB=Brass BBPC=Brass/Chrome Plated BBHS=Brass/High Strength
 CC=Ceramic CM=Chrome-Moly D=Acetal F=Cast Iron FCM=Forged Chrome-moly
 FPM=Fluorocarbon NAB=Nickel Aluminum Bronze NABC=Nickel Aluminum Bronze Chrome Plated
 NBR=Medium Nitrile PE=Polyethylene (Buna-N) PTFE=Pure Polytetrafluoroethylene
 PVDF=Polyvinylidene Fluoride S=304SS SS=316SS SSZZ=316SS/Zamak STCP=Steel/Chrome Plated
 STG=Special Blend PTFE White STL=Steel STZP=Steel/Zinc Plated



Models 6771, 6775, 6777



- 1 Dipstick offers convenient top access for easy oil level check.
- 2 Special concentric, high-density, polished, solid ceramic plungers provide a true wear surface and extend seal life.
- 3 Manifolds are a high tensile strength brass, 316 stainless steel or nickel aluminum bronze for long term, continuous duty.
- 4 100% wet seal design adds to service life by allowing pumped liquids to cool and lubricate on both sides.
- 5 Stainless steel valves, seats and springs provide corrosion-resistance, ultimate seating and extended life.
- 6 Specially formulated, CAT PUMP exclusive, V-Packings offer unmatched performance and seal life.

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