

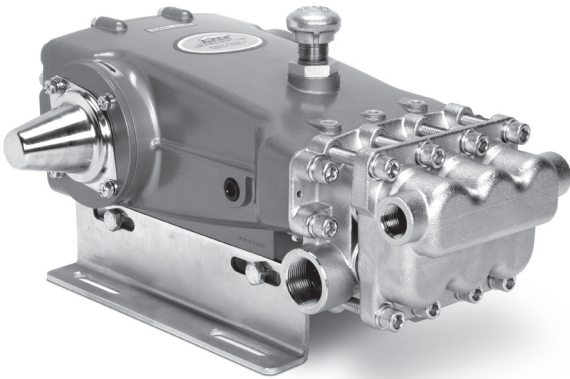
DATA SHEET

25 FRAME PLUNGER PUMP



Bass Model: 2530.44101

Stainless Steel Model: 2531.44101



Model 2530.44101 Shown
(Shaft protector and mounting rails sold separately)

| SPECIFICATIONS | U.S. Measure | Metric Measure |
|-------------------------|-----------------------|-----------------------|
| Flow | 25 gpm | 95 lpm |
| Pressure Range | 100 to 1200 psi | 6.9 to 83 bar |
| Pump RPM* | 1025 rpm | 1025 rpm |
| Inlet Pressure Range | Flooded to 70 psi | Flooded to 4.9 bar |
| Max. Liquid Temp. (FPM) | 240° F | 115° C |
| Bore | 1.260" | 32 mm |
| Stroke | 1.516" | 38.5 mm |
| Crankcase Capacity | 84 oz. | 2.5 l |
| Inlet Ports (2) | 1-1/4" NPT(F) | 1-1/4" NPT(F) |
| Discharge Ports (2) | 3/4" NPT(F) | 3/4" NPT(F) |
| Pulley Mounting | Either Side | Either Side |
| Shaft Diameter | 1.181" | 30 mm |
| Weight | 68.3 lbs. | 31 kg |
| Dimensions | 19.11 x 15.04 x 9.25" | 485.44 x 382 x 235 mm |

*Pump minimum is 100 RPM.

FEATURES

- Field- tested, high pressure triplex pump configured for high temperature TEG (triethylene glycol) applications up to 240°F/115°C. May be used in other high temperature applications with fluids possessing adequate lubrication properties. Contact Cat Pumps for more information.
- Positive displacement technology for optimum energy efficiency.
- Re-configured pump .44101 option consists of following materials:
 - O-Ring material throughout the pump: Fluoropolymer elastomers.
 - Oil filler cap assembly: Brass adapters, chrome-plated steel vented cap.
 - Rear sight gauge assembly: Aluminum sight adapter and stainless steel sight gauge.
 - Seal retainers: Aluminum.
 - Low-pressure seals and V-Packings: Special PTFE blends.

ELECTRIC HORSEPOWER REQUIREMENTS

| FLOW | | PRESSURE | | | RPM |
|------|-----|------------|-------------|-------------|------|
| | | psi 800 | psi 1000 | psi 1200 | |
| gpm | lpm | bar 55 | bar 69 | bar 83 | |
| 25 | 95 | 13.7 | 17.1 | 20.5 | 1025 |
| 21 | 80 | 11.5 | 14.4 | 17.3 | 860 |

$$\text{DETERMINING THE PUMP R.P.M.} \quad \frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{"Desired" gpm}}{\text{"Desired" rpm}}$$

$$\text{DETERMINING THE REQUIRED H.P.} \quad \text{Hp (Electric Brake)} = \frac{\text{gpm} \times \text{psi}}{1460}$$

$$\text{DETERMINING MOTOR PULLEY SIZE} \quad \frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}} = \frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$$

Refer to pump **Service Manual** for repair procedure and additional technical information.

PARTS LIST

| ITEM | PART NUMBER | MATL | PART NUMBER | MATL | DESCRIPTION | QTY |
|------|-------------------|--------|-------------------|--------|--|-----|
| | 2530.44101 | | 2531.44101 | | | |
| 5 | 126544 | STCP R | 125753 | S | Screw, HHC, Sems (M8x25) | 8 |
| 8 | 49533 | ALE | 49533 | ALE | Cover, Bearing (See Tech Bulletin 118) | 2 |
| 10 | 76772 | FPM | 76772 | FPM | O-Ring, Bearing Cover - 75D | 2 |
| 11 | 76771 | FPM | 76771 | FPM | Seal, Oil, Crankshaft - 70D | 2 |
| 15 | 26512 | STL | 26512 | STL | Bearing, Ball | 2 |
| 20 | 48613 | TNM | 48613 | TNM | Rod, Connecting | 3 |
| 21 | 126562 | STCP R | 126562 | STCP R | Washer, Locking | 3 |
| 25 | 49795 | FCM | 49795 | FCM | Crankshaft - Dual End (38.5mm) | 1 |
| 31 | 76411 | BB | 76411 | BB | Adapter, 3/4" NPT | 1 |
| 32 | 992623 | BB | 992623 | BB | Nipple, Close 3/4" NPT | 1 |
| 33 | 76331 | STCP | 76331 | STCP | Cap, Vented | 1 |
| 36 | 26996 | FPM | 26996 | FPM | O-Ring, Dipstick - 70D | 1 |
| 37 | 92241 | — | 92241 | — | Gasket, Oil, Bubble w/Gasket - 80D | 1 |
| 38 | 44428 | NBR | 44428 | NBR | Gasket, Flat, Oil Gauge - 80D | 1 |
| 39 | 76769 | AL | 76769 | AL | Dipstick | 1 |
| 40 | 126544 | STCP R | 125753 | S | Screw, HHC, Sems (M8x25) | 8 |
| 48 | 25625 | STCP | 25625 | STCP | Plug, Drain (1/4"x19BSP) | 1 |
| 49 | 30322 | FPM | 30322 | FPM | O-Ring, Drain Plug | 1 |
| 50 | 133582 | ALE | 133582 | ALE | Cover, Rear (See Tech Bulletin 118 and 126) | 1 |
| 51 | 76767 | FPM | 76767 | FPM | O-Ring, Rear Cover -70D | 1 |
| 53 | 49520 | ALE | 49520 | ALE | Crankcase w/Guide Pins (See Tech Bulletin 118) | 1 |
| 54 | 27488 | S | 27488 | S | Pin, Guide | 2 |
| 64 | 27784 | CM | 27784 | CM | Pin, Crosshead | 3 |
| 65 | 48719 | SSHS | 48719 | SSHS | Rod, Plunger | 3 |
| 70 | 76785 | FPM | 76785 | FPM | Seal, Crankcase Oil -70D | 3 |
| 75 | 110669 | S | 110669 | S | Slinger, Barrier | 3 |
| 88 | 110670 | S | 110670 | S | Washer, Keyhole | 3 |
| 90 | 45749 | CC | 45749 | CC | Plunger (M32x93) | 3 |
| 95 | † 89835 | SS | † 89835 | SS | Stud, Retainer (M7x87) | 3 |
| 96 | 20184 | PTFE | 20184 | PTFE | Back-up-Ring, Plunger Retainer | 3 |
| 97 | 14161 | FPM | 14161 | FPM | O-Ring, Plunger Retainer - 70D | 3 |
| 98 | 44069 | SS | 44069 | SS | Gasket, Plunger Retainer | 3 |
| 99 | 44068 | SS | 44068 | SS | Retainer, Plunger [7/02] | 3 |
| 100 | 76116 | AL | 76116 | AL | Retainer, LPS | 3 |
| 106 | 76298 | ST2 | 76298 | ST2 | Seal, LPS w/SS-Spg | 3 |
| 110 | 49265 | CFBB | 48583 | SS | Manifold, Inlet | 1 |
| 116 | 126570 | STCP R | 19085 | S | Lockwasher | 4 |
| 117 | 126518 | STCP R | 88398 | S | Screw, HSH (M12x40) | 4 |
| 125 | 76832 | ST4 | 76832 | ST4 | Seal, HPS w/S | 3 |
| 143 | 11731 | FPM | 11731 | FPM | O-Ring, Adapter, LPS, Rear | 3 |
| 150 | 45752 | BB | 45835 | SS | Adapter, LPS | 3 |
| 154 | 11744 | FPM | 11744 | FPM | O-Ring, Adapter, LPS, Front | 3 |
| 155 | 11745 | FPM | 11745 | FPM | O-Ring, Adapter, Valve -70D | 6 |
| 157 | 45751 | BB | 45834 | SS | Adapter, Valve | 3 |
| 164 | † 46857 | SS | † 46857 | SS | Seat [11/95] (See Tech Bulletin 076) | 6 |
| 165 | 48238 | FPM | 48238 | FPM | O-Ring, Seat | 6 |
| 166 | † 45839 | SS | † 45839 | SS | Valve | 6 |
| 167 | † 45840 | SS | † 45840 | SS | Spring | 6 |
| 168 | 110682 | PVDF | 110682 | PVDF | Retainer, Spring | 6 |
| 185 | 49267 | CFBB | 48585 | SS | Manifold, Discharge | 1 |
| 186 | 126570 | STCP R | 19085 | S | Lockwasher | 8 |
| 188 | 126517 | STCP R | 89628 | S | Screw, HSH (M12x65) | 8 |

Optional Parts And Accessories On Page 4

Bold print part numbers are unique to a particular pump model. [] Date of latest production change.

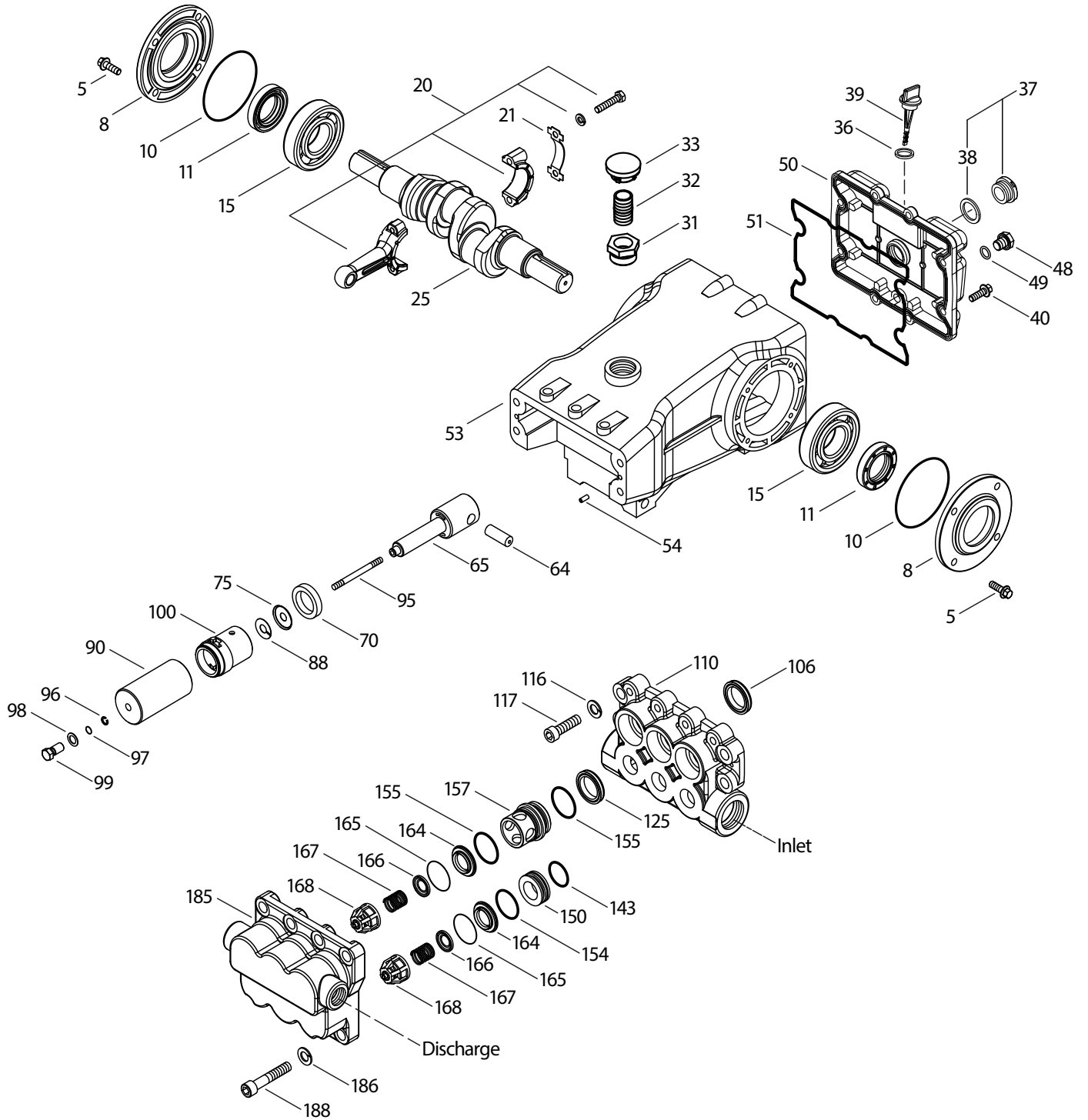
† Production parts different from service parts. R Components comply with RoHS Directive.

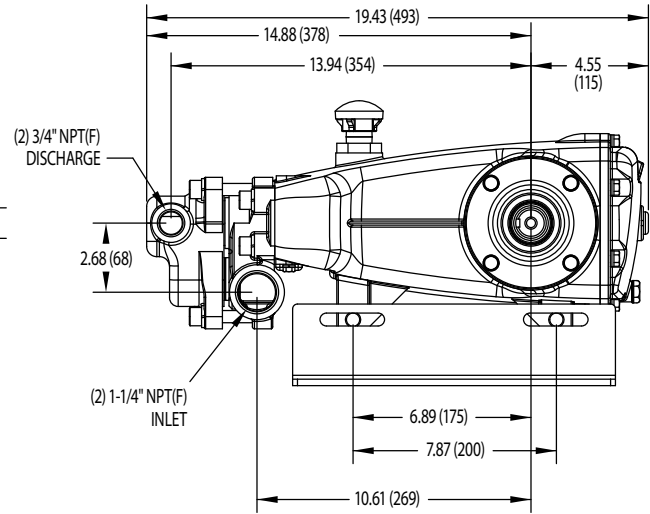
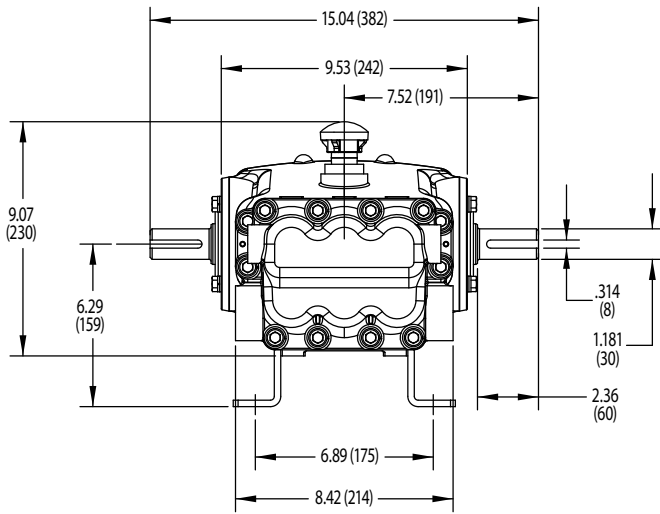
*Review individual parts in each kit for material code identification.

View Tech Bulletins 024, 036, 043, 053, 074, 076, 081, 083, 085, 095, 118 and 126 for additional information.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum ALE=Aluminum Epoxy BB=Brass CC=Ceramic CFBB=Chrome Forged Brass CM=Chrome-moly FCM=Forged Chrome-moly
 FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SS=316SS STL=Steel ST2=Special PTFE 2
 ST4=Special PTFE4 SSHS=316SS/High Strength STCP=Steel/Chrome Plated TNM=Special High Strength

EXPLODED VIEW

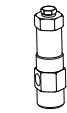




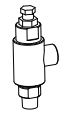
Models 2530.44101, 2531.44101

REPAIR KITS AND PARTS

| Part Number | Description | QTY |
|----------------------------|--|-----|
| 76087 | Kit, Seal (Includes Items 97, 106, 125, 143, 154, and 155) | 1 |
| 31267 | Kit, Valve (Includes Items 143, 154, 155, 164, 165, 166, 167, and 168) | 2 |
| 6107 | Oil, Bottle (21 oz.) ISO 68 Hydraulic | 4 |
| 6119 | Lubricant, Antiseize (1 oz.) | 1 |
| 990036 | Key (M8x7x40) | 1 |
| 814838.44101/ 816735.44101 | Complete Head | 1 |



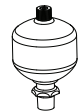
7022
7022.100



890702
890713



7590.0110
7590.1110



6013

OPTIONAL PARTS AND ACCESSORIES

| Part Number | Description | QTY |
|-------------------|---|-----|
| 7022/ 7022.100 | Regulator (Primary Pressure Control) | 1 |
| 7590.0110 | Unloader (Primary Pressure Control) | 1 |
| 7590.1110/ 890702 | Relief Valve (Secondary Pressure Control) | 1 |
| 7590.1110/ 890713 | Pop-Off Valve (Secondary Pressure Control) | 1 |
| 6073 | Pressure Gauge | 1 |
| 6013 | Accumulator | 1 |
| 30614 | Mounting Rails | 1 |
| 26516 | Shaft Protector | 1 |
| 76144 | Kit, Oil Indicator (3/8" x 24") See Individual Data Sheet | 1 |
| 34334 | Kit, Oil Drain (3/8" x 24") See Individual Data Sheet | 1 |
| 30696 | Pliers (Reverse) | 1 |



26516



6073



6107



34334

⚠ 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.