

Model 1540E.44101 Shown
(Rails sold separately)

15 Frame Plunger Pump Triethylene Glycol (TEG) Dehydration

**Standard
Model**

1540E.44101

**Stainless Steel
Model**

1541.44101

FEATURES

- Designed for continuous-duty performance for triethylene glycol (TEG) gas dehydration where low life cycle costs are a must.
- Field tested, high pressure triplex pump configured for TEG temperatures up to 240° F (116° C).
- Positive displacement technology for optimum energy efficiency.

SPECIFICATIONS

| | U.S. Measure | Metric Measure |
|----------------------------------|-----------------------|----------------------|
| Flow | 18.0 gpm | (68 lpm) |
| Pressure Range..... | 100 to 1200 psi | (7 to 85 bar) |
| RPM | 1100 rpm | (1100 rpm) |
| Inlet Pressure Range..... | Flooded to 70 psi | (Flooded to 4.9 bar) |
| Bore | 1.181" | (30 mm) |
| Stroke..... | 1.181" | (30 mm) |
| Crankcase Capacity..... | 42 oz. | (1.26 L) |
| Maximum Liquid Temperature | 240°F | (116°C) |
| Inlet Ports (2) | 1" NPTF | (1" NPTF) |
| Discharge Ports (2)..... | 3/4" NPTF | (3/4" NPTF) |
| Pulley Mounting | Either Side | (Either Side) |
| Shaft Diameter | 1.181" | (30 mm) |
| Weight..... | 42.6 lbs. | (21 kg) |
| Dimensions..... | 14.79 x 12.99" x 8.25 | (376 x 330 x 210mm) |

ELECTRIC HORSEPOWER REQUIREMENTS

| FLOW | | PRESSURE | | | RPM |
|-------------|-----|------------|-------------|-------------|------|
| | | psi 800 | psi 1000 | psi 1200 | |
| U.S. gpm | lpm | bar 55 | bar 70 | bar 85 | |
| 18 | 68 | 9.9 | 12.3 | 14.8 | 1100 |
| 15 | 57 | 8.2 | 10.3 | 12.3 | 917 |

⚠ 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.

**DETERMINING
THE PUMP R.P.M.**

$$\frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{"Desired" gpm}}{\text{"Desired" rpm}}$$

**DETERMINING
THE REQUIRED H.P.**

$$\frac{\text{gpm} \times \text{psi}}{1460} = \text{Electric Brake H. P. Required}$$

**DETERMINING
MOTOR PULLEY SIZE**

$$\frac{\text{Motor Pulley O.D.}}{\text{Pump rpm}} = \frac{\text{Pump Pulley O.D.}}{\text{Motor rpm}}$$

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

PARTS LIST

| ITEM | PART NUMBER | | MATERIAL | | DESCRIPTION | QTY |
|------|---------------|------------|--------------|-----------|-------------------------------|-----|
| | 1540E.44101 | MATL | 1541.44101 | MATL | | |
| 5 | 92538 | S | 92538 | S | Screw, HHC Sems (M6x16) | 8 |
| 8 | 49535 | ALE | 43496 | AL | Cover, Bearing | 2 |
| 9 | 815281 | FBR | 815281 | FBR | Shim, Split 2-Pc | 3 |
| 10 | 76340 | FPM | 76340 | FPM | O-Ring, Bearing Cover - 75D | 2 |
| 11 | 76491 | FPM | 76491 | FPM | Seal, Oil, Crankshaft - 70D | 2 |
| 12 | 814800 | S | 814800 | S | Shim, Split, 2-Pc | 2 |
| 15 | 39060 | STL | 39060 | STL | Bearing, Roller | 2 |
| 20 | 48600 | TNM | 48600 | TNM | Rod, Connecting Assembly | 3 |
| 25 | 43494 | FCM | 43494 | FCM | Crankshaft, Dual-End (M30) | 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 | 76792 | SS | 76792 | SS | Gauge, Sight | 1 |
| 37 | 76791 | AL | 76791 | AL | Adapter, Sight | 1 |
| 38 | 44428 | NBR | 44428 | NBR | Gasket, Flat, Adapter - 80D | 1 |
| 40 | 92542 | S | 92542 | S | Screw, HHC Sems (M6x20) | 4 |
| 48 | 25625 | STCP | 25625 | STCP | Plug, Drain (1/4"x19BSP) | 1 |
| 49 | 30322 | FPM | 30322 | FPM | O-Ring, Drain Plug | 1 |
| 50 | 49276 | ALE | 43491 | AL | Cover, Rear | 1 |
| 51 | 76834 | FPM | 76834 | FPM | O-Ring, Rear Cover - 75D | 1 |
| 53 | 49273 | ALE | 48925 | AL | Crankcase (Includes Guidepin) | 1 |
| 64 | 43507 | CM | 43507 | CM | Pin, Crosshead | 3 |
| 65 | 48933 | SHS | 49611 | SS | Rod, Plunger (Center) | 1 |
| 66 | 48931 | SHS | 49609 | SS | Rod, Plunger (Outside) | 2 |
| 69 | 126596 | STCP R | 126596 | STCP R | Washer, Oil Seal | 3 |
| 70 | 76500 | FPM | 76500 | FPM | Seal, Oil Crankcase | 3 |
| 75 | 48937 | S | 48937 | S | Slinger, Barrier | 3 |
| 90 | 48938 | CC | 48938 | CC | Plunger, Ceramic (M30x65) | 3 |
| 98 | 48394 | FPM | 48394 | FPM | Washer, Seal - 90D | 3 |
| 99 | † 48201 | SS | † 48201 | SS | Retainer, Plunger | 3 |
| 100 | 76926 | AL | 76926 | AL | Retainer, Seal | 3 |
| 106 | 702939 | ST4 | 702939 | ST4 | Seal, LPS w/NIH-Spg | 3 |
| 110 | 48940 | FBB | 49614 | SS | Manifold, Inlet | 1 |
| 112 | 76903 | FPM | 76903 | FPM | O-Ring, Inlet Manifold - 80D | 3 |
| 117 | 49044 | S | 49044 | S | Screw, HSH (M10x25) | 4 |
| 125 | 702945 | ST4 | 702945 | ST4 | Seal, HPS | 3 |
| 155 | 76903 | FPM | 76903 | FPM | O-Ring, Spacer - 80D | 6 |
| 157 | 48946 | BB | 49621 | SS | Spacer, HPS | 3 |
| 163 | 14331 | FPM | 14331 | FPM | O-Ring, Seat - 70D | 6 |
| 164 | 48951 | S | 49626 | SS | Seat | 6 |
| 166 | 48686 | SS | 48686 | SS | Valve | 6 |
| 167 | 48687 | SS | 48687 | SS | Spring, Valve | 6 |
| 168 | 48994 | PVDF | 48994 | PVDF | Retainer, Spring | 6 |
| 170 | 123764 | S | 49627 | SS | Washer, Spring Retainer | 6 |
| 172 | 14183 | FPM | 14183 | FPM | O-Ring, Valve Plug | 3 |
| 174 | 48952 | FBB | 49628 | SS | Plug, Valve | 3 |
| 185 | 48948 | FBB | 49623 | SS | Manifold, Discharge | 1 |
| 188 | 87952 | S | 87952 | S | Screw, HSH (M10x55) | 10 |

Optional Parts And Accessories On Page 4

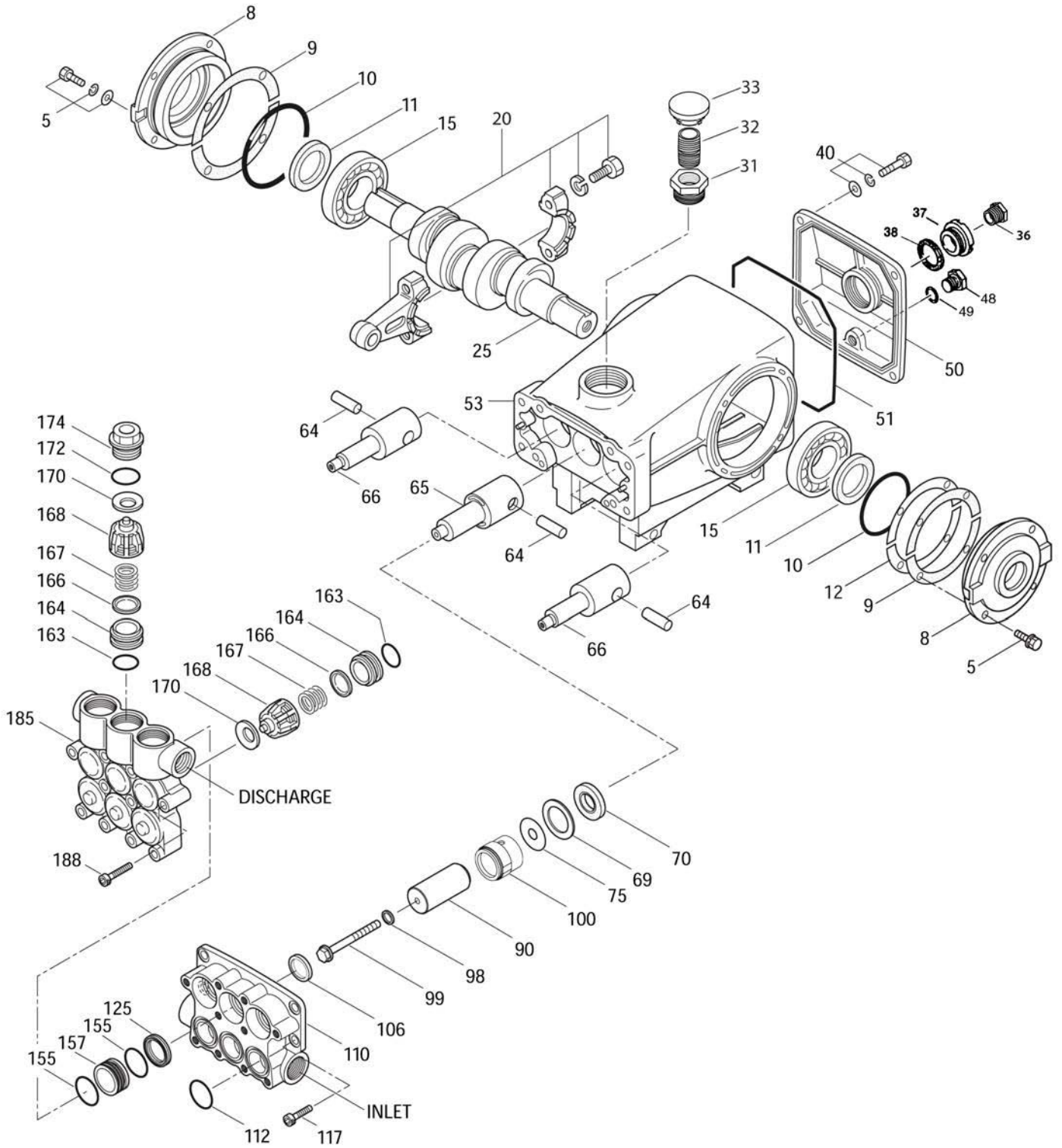
Bold part numbers are unique to a particular pump model.

†Production parts are different than replacement parts. R Components comply with RoHS Directive.

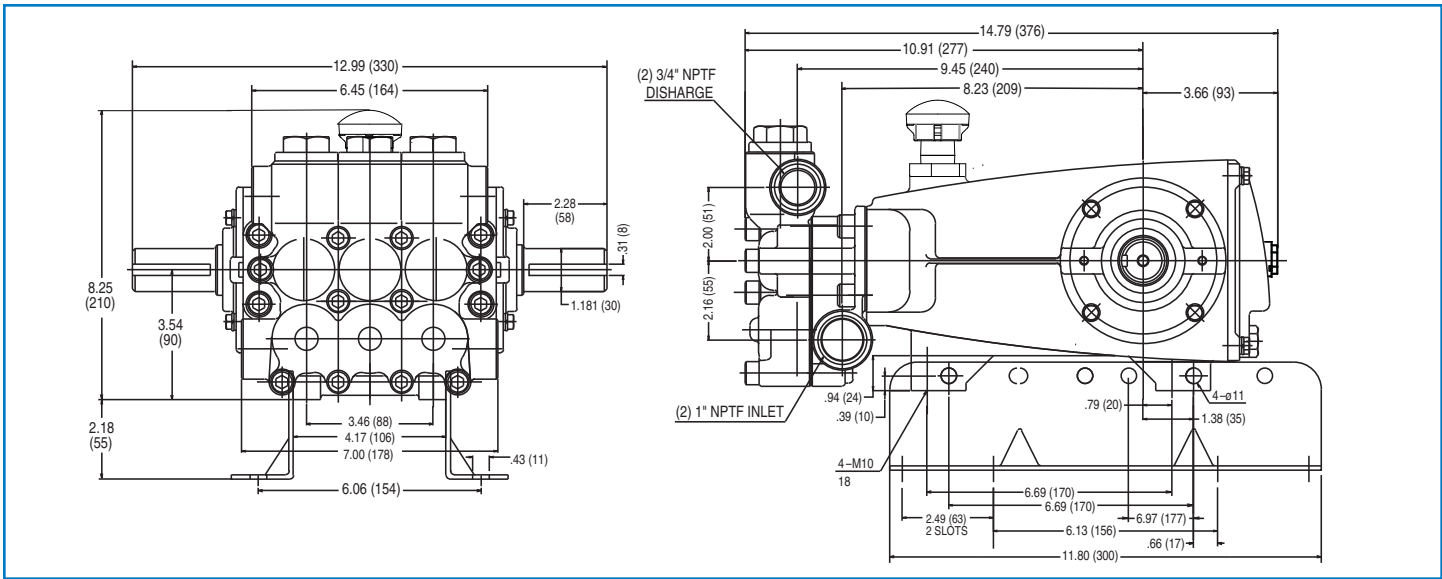
View Tech Bulletins 002, 003, 024, 035, 036, 043, 053, 074, 077, 083, 095 and 100 for additional information.

MATERIAL CODES (Not Part of Part Number): AL=Aluminum ALE=Aluminum Epoxy BB=Brass CC=Ceramic CM=Chrome-moly
 FBB=Forged Brass FCM=Forged Chrome-moly FPM=Fluorocarbon NBR=Medium Nitrile (Buna-N) PVDF=Polyvinylidene Fluoride S=304SS
 SHS=304SS/High Strength SS=316SS ST4=Special PTFE 4 STCP=Steel/Chrome Plated STL=Steel TNM=Special High Strength

EXPLODED VIEW



Model
Brass - 1540E.44101
Stainless Steel - 1541.44101
November 2011



Models 1540E.44101, 1541.44101

OPTIONAL PARTS AND ACCESSORIES

| Part Number | Description | QTY | | |
|----------------------------|--|-----|------------------------|------------------------|
| 7022/ 7022.100 | Regulator (Primary Pressure Control) | 1 | | |
| 7534.0110/ 7531.0110 | Unloader (Primary Pressure Control) | 1 | | |
| 7534.1110/ 7531.0110 | Relief Valve (Secondary Pressure Control) | 1 | | |
| 7534.1110/ 7531.1110 | Pop-Off Valve (Secondary Pressure Control) | 1 | 7022 7022.100 | 7534.1100 7531.1110 |
| 6073 | Pressure Gauge | 1 | | |
| 6013 | Accumulator | 1 | | |
| 30613 | Mounting Rails | 1 | | 6073 |
| 30067/ 990036 | Key (M8x7.5x25)/(M8x7x40) | 1 | 7534.0110 7531.1110 | |
| 76334 | 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 | | |
| 76093 | Kit, Seal (Includes Items 98, 106, 112, 125, and 155) | 1 | | |
| 76775 (1540E.44101) | Kit, Valve (Includes Items 163, 164, 166,167, 168 170 and 172) | 2 | 6013 | 34334 |
| 76450 (1541.44101) | Kit, Valve (Includes Items 163, 164, 166,167, 168 170 and 172) | 2 | | |
| 816863.44101/ 818443.44101 | Complete Head | 1 | | |
| 30696 | Pliers (Reverse) | 1 | | |
| 44050 | Tool, Sight Gauge Removal | 1 | | |
| 6107 | Oil, Bottle (21 oz.) ISO 68 Hydraulic | 2 | 6107 | 30613 |
| 6119 | Lubricant, Antiseize (1 oz.) | 1 | | |

Demand Genuine Cat Pump Parts And Accessories.



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