

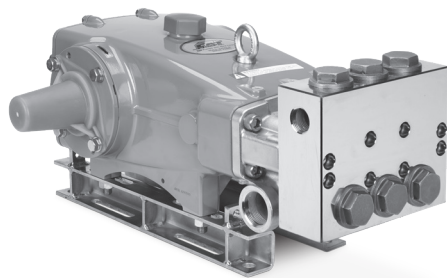
# DATA SHEET

## 35 FRAME PLUNGER PUMPS



**Brass Models: 3570, 3570S**

**Flushed Model: 3570C**



Model 3570 Shown  
(Shaft protector included, mounting rails sold separately)

### FEATURES

- Triplex plunger design ensures high efficiency and low pulsation.
- V-packings and low-pressure seals are completely lubricated and cooled by pumped liquid.
- Special high-density, polished concentric plungers provide a true wear surface for extended seal life.
- Model 3570C offers an external flush for high-temperature or low-lubricity liquids.
- Pump comes standard with NBR seals. Alternative seal materials are available for higher temperature or chemical compatibility.

### SPECIFICATIONS

|                                                                         | U.S. Measure          | Metric Measure     |
|-------------------------------------------------------------------------|-----------------------|--------------------|
| Flow*                                                                   | 30 gpm                | 114 lpm            |
| Pressure Range (3570, 3570C)                                            | 100–2500 psi          | 6.9–170 bar        |
| Pressure Range* (3570S)                                                 | 100–3000 psi          | 6.9–207 bar        |
| Pump RPM**                                                              | 1080 rpm              | 1080 rpm           |
| Inlet Pressure Range                                                    | Flooded to 70 psi     | Flooded to 4.8 bar |
| Maximum Liquid Temp. (NBR)                                              | 120° F                | 48° C              |
| <b>Alternative seals available for higher temperatures up to 140° F</b> |                       |                    |
| Bore                                                                    | 1.260"                | 32 mm              |
| Stroke                                                                  | 1.890"                | 48 mm              |
| Crankcase Capacity                                                      | 4.2 qts               | 4 l                |
| Inlet Ports (2)                                                         | 1½" NPT(F)            | 1½" NPT(F)         |
| Flush Ports (2)                                                         | ¼" NPT(F)             | ¼" NPT(F)          |
| Discharge Ports (2)                                                     | 1" NPT(F)             | 1" NPT(F)          |
| Shaft Diameter                                                          | 1.378"                | 35 mm              |
| Pulley Mounting                                                         | Either Side           | Either Side        |
| Weight                                                                  | 138.9 lbs             | 63 kg              |
| Dimensions                                                              | 23.94 x 18.11 x 9.74" | 608 x 460 x 247 mm |

\*Intermittent duty only

\*\*Pump minimum is 100 RPM.

### INTERMITTENT DUTY CYCLE DEFINED AS:

Operating pump at maximum rated flow and pressure for no more than 50% of the time in any given hour.

### ALTERNATIVE SEAL CONFIGURATION

| MATERIAL | SUFFIX CODE | MAXIMUM TEMPERATURE |         |
|----------|-------------|---------------------|---------|
| NBR      | —           | 120° F              | (48° C) |
| FPM      | .0110       | 180° F              | (82° C) |
| EPDM     | .0220       | 160° F              | (71° C) |

See **Tech Bulletin 002** for inlet conditions and RPM at high-temperature.

### DETERMINING THE PUMP RPM

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

### DETERMINING THE REQUIRED HP

$$\frac{\text{hp (Electric Brake)}}{1460} = \frac{\text{gpm} \times \text{psi}}{1460}$$

### DETERMINING MOTOR PULLEY SIZE

$$\frac{\text{Motor Pulley OD}}{\text{Pump rpm}} = \frac{\text{Pump Pulley OD}}{\text{Motor rpm}}$$

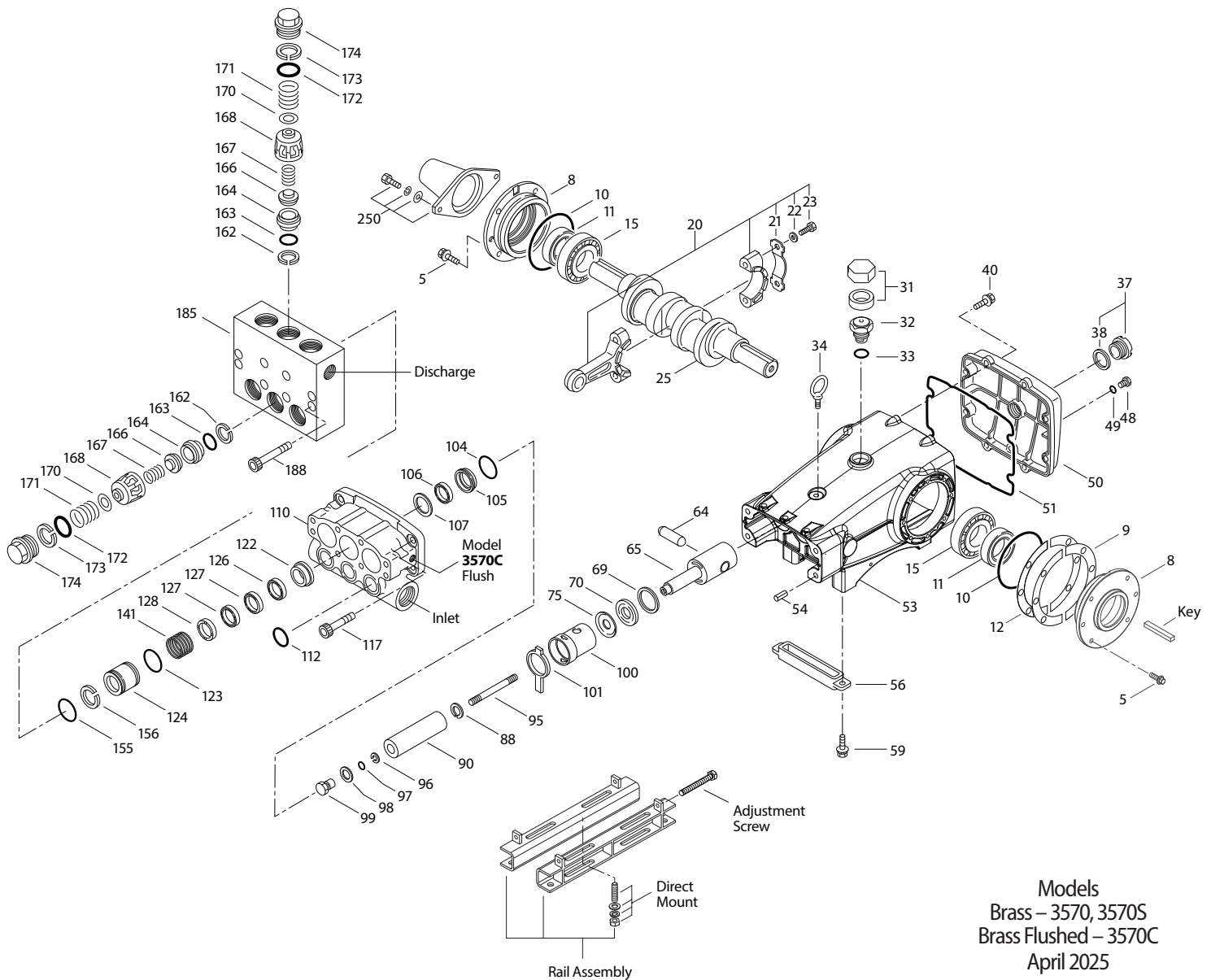
Refer to pump **Service Manual** for repair procedure and additional technical information.

# PARTS LIST

| ITEM | P/N           | MATL   | DESCRIPTION                                                                  | QTY |
|------|---------------|--------|------------------------------------------------------------------------------|-----|
| 5    | 96049         | S      | Screw, HHC, Sems (M10 x 25) (See Tech Bulletins 074)                         | 8   |
| 8    | 134604        | ALE    | Cover, Bearing                                                               | 2   |
| 9    | 815279        | FBR    | Shim, Split, 2-Piece                                                         | 2   |
| 10   | 12398         | NBR    | O-Ring, Bearing Cover                                                        | 2   |
| 11   | 13296         | NBR    | Seal, Oil, Crankshaft                                                        | 2   |
| 12   | 855049        | S      | Shim, Split, 2-Piece                                                         | 0-2 |
| 15   | 29326         | STL    | Bearing, Roller                                                              | 2   |
| 20   | 121467        | TNM    | Rod, Connecting Assembly (Includes: 21, 22, 23) (See Tech Bulletin 074)      | 3   |
| 21   | 126749        | STCP R | Washer, Locking (M10)                                                        | 3   |
| 22   | 126593        | STCP R | Washer, Flat (M10.5)                                                         | 6   |
| 23   | 122045        | STZP   | Screw, HH (M10 x 55)                                                         | 6   |
| 25   | 29325         | FCM    | Crankshaft, Dual-End (M48)                                                   | 1   |
| 31   | 828710        | PE     | Protector, Oil Cap with Foam Gasket                                          | 1   |
| 32   | 43211         | ABS    | Cap, Oil Filler                                                              | 1   |
| 33   | 14177         | NBR    | O-Ring, Oil Filler Cap                                                       | 1   |
| 34   | 126743        | STCP R | Bolt, Eye (M12 x 1.75) (For Lifting Pump Only)                               | 1   |
| 37   | 92241         | PC     | Gauge, Oil, Bubble with Gasket (See Tech Bulletin 074)                       | 1   |
| 38   | 44428         | NBR    | Gasket, Flat, Oil Gauge                                                      | 1   |
| 40   | 125753        | S      | Screw, HHC, Sems (M8 x 25) (See Tech Bulletin 074)                           | 8   |
| 48   | 25625         | STCP   | Plug, Drain (1/4" x 19 BSP)                                                  | 1   |
| 49   | 23170         | NBR    | O-Ring, Drain Plug                                                           | 1   |
| 50   | 45936         | ALE    | Cover, Crankcase                                                             | 1   |
| 51   | 16612         | NBR    | O-Ring, Crankcase                                                            | 1   |
| 53   | 134784        | ALE    | Crankcase Assembly (Includes: 54)                                            | 1   |
| 54   | 27488         | S      | Pins, Guide                                                                  | 2   |
| 56   | 27790         | POP    | Pan, Oil                                                                     | 1   |
| 59   | 92538         | S      | Screw, HHC, Sems (M6 x 16)                                                   | 2   |
| 64   | 43864         | CM     | Pin, Crosshead                                                               | 3   |
| 65   | 49166         | SSHB   | Rod, Plunger                                                                 | 3   |
| 69   | 126587        | STCP R | Washer, Oil Seal                                                             | 3   |
| 70   | 100488        | NBRS   | Seal, Oil, Crankcase                                                         | 3   |
| 75   | 43865         | S      | Slinger, Barrier                                                             | 3   |
| 88   | 45676         | S      | Washer, Keyhole (M16)                                                        | 3   |
| 90   | 43957         | CC     | Plunger (M32 x 145)                                                          | 3   |
| 95   | † 89778       | SS     | Stud, Plunger Retainer (M10 x 135)                                           | 3   |
| 96   | 20189         | PTFE   | Backup Ring, Plunger Retainer                                                | 3   |
| 97   | 11345         | NBR    | O-Ring, Plunger Retainer                                                     | 3   |
| 98   | 44085         | SS     | Gasket, Retainer                                                             | 3   |
| 99   | † 44084       | SS     | Retainer, Plunger (M10) (See Tech Bulletin 074)                              | 3   |
| 100  | 44119         | PPG    | Retainer, Seal                                                               | 3   |
| 101  | 44106         | —      | Wick, Long Tab                                                               | 3   |
| 104  | 43875         | NBR    | O-Ring, Adapter                                                              | 3   |
| 105  | 49741         | BB     | Adapter, Low-Pressure Seal                                                   | 3   |
| 106  | † 44098       | NBR    | Seal, Low-Pressure with SS-Spring                                            | 3   |
| 107  | 43962         | S      | Washer, Low-Pressure Seal                                                    | 3   |
| 110  | <b>49464</b>  | BBCP R | Manifold, Inlet (Models 3570, 3570S)                                         | 1   |
|      | <b>670305</b> | BBCP R | Manifold, Inlet, Flushed (Model 3570C)                                       | 1   |
| 112  | 11379         | NBR    | O-Ring, Inlet Manifold                                                       | 3   |
| 117  | 44585         | S      | Screw, HSH (M14 x 40) (See Tech Bulletin 074)                                | 4   |
| 122  | 49744         | BB     | Spacer, V-Packing                                                            | 3   |
| 123  | 12391         | NBR    | O-Ring, Spacer                                                               | 3   |
| 124  | 49742         | BB     | Cylinder, V-Packing                                                          | 3   |
| 126  | 43963         | BB     | Adapter, Female                                                              | 3   |
| 127  | † 44608       | STG    | V-Packing                                                                    | 6   |
| 128  | 43965         | BB     | Adapter, Male                                                                | 3   |
| 141  | 49743         | SS     | Spring, Coil                                                                 | 3   |
| 155  | 48860         | NBR    | O-Ring, V-Packing Cylinder                                                   | 3   |
| 156  | 48362         | D      | Backup Ring, V-Packing Cylinder                                              | 3   |
| 162  | 48363         | D      | Backup Ring, Valve Seat                                                      | 6   |
| 163  | 26142         | NBR    | O-Ring, Valve Seat                                                           | 6   |
| 164  | 133052        | S      | Seat, Valve                                                                  | 6   |
| 166  | 43932         | S      | Valve                                                                        | 6   |
| 167  | 133053        | S      | Spring                                                                       | 6   |
| 168  | 44728         | PVDF   | Retainer, Spring                                                             | 6   |
| 170  | 44729         | SS     | Washer, Spring                                                               | 6   |
| 171  | 44644         | SS     | Spring, Coil                                                                 | 6   |
| 172  | 89827         | NBR    | O-Ring, Valve Plug                                                           | 6   |
| 173  | 48364         | D      | Backup Ring, Valve Plug                                                      | 6   |
| 174  | 44643         | NAB    | Plug, Valve (See Tech Bulletin 074)                                          | 6   |
| 185  | <b>133049</b> | BBCP   | Manifold, Discharge (Models 3570, 3570C)                                     | 1   |
|      | <b>133559</b> | SS     | Manifold, Discharge (Model 3570S)                                            | 1   |
| 188  | 89981         | S      | Screw, HSH (M12 x 70) (See Tech Bulletin 074)                                | 8   |
| 250  | 855042        | POP    | Protector, Shaft with 2 Screws, Lockwashers and Washers (Included with Pump) | 1   |

Optional Parts and Accessories and Service parts listed on page 3. Standard and optional Seal and Valve Kits listed on page 4.

# EXPLODED VIEW



Models  
Brass – 3570, 3570S  
Brass Flushed – 3570C  
April 2025

## OPTIONAL PARTS AND ACCESSORIES

| PART   | DESCRIPTION                                           | QTY |
|--------|-------------------------------------------------------|-----|
| 34021  | Key (M10 x 8 x 70)                                    | 1   |
| 92674  | Assembly, Rail (Includes: 34018)                      | 1   |
| 34018  | Mount, Direct                                         | 1   |
| 990013 | Hub, "B", 35 mm (Not Shown)                           | 1   |
| 80540  | Screw, Adjusting (M12 x 100)                          | 2   |
| 34334  | Kit, Oil Drain (3/8" x 24") (Not Shown)               | 1   |
| 819000 | Assembly, Crankcase, Cast Iron Conversion (Not Shown) | 1   |

## SERVICE PARTS

| PART           | DESCRIPTION                                                                                                             | QTY |
|----------------|-------------------------------------------------------------------------------------------------------------------------|-----|
| <b>76841</b>   | Kit, Seal – Standard NBR                                                                                                | 1   |
| <b>76794</b>   | Kit, Valve – Standard NBR                                                                                               | 2   |
| 6100           | Oil, Case (12 - 21 oz bottle)<br>(Fill to Specified Crankcase Capacity Prior to Start-up)                               | 1   |
| 6124           | Gasket, Liquid (3 oz)                                                                                                   | 1   |
| 6139           | Lubricant, Anti-seize (8 oz) (See Tech Bulletin 095)                                                                    | 1   |
| 32273          | Crankcase Oil Seal Removal & Installation Kit (Not Shown)<br>(Includes: Oil Seals, Guide Tool, Screws, Washers, Driver) | 1   |
| <b>818610</b>  | Head, Complete, with NBR Seals and O-Rings (Model 3570)                                                                 | 1   |
| <b>818610S</b> | Head, Complete, with NBR Seals and O-Rings (Model 3570S)                                                                | 1   |

**Bold print part numbers are unique to a particular pump model.** R Components comply with RoHS Directive.

For additional technical information see [www.catpumps.com/literature/tech-bulletins](http://www.catpumps.com/literature/tech-bulletins). † Production parts different from service parts.

MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic ALE=Aluminum Epoxy BB=Brass BBCP=Brass/Chrome Plated CC=Ceramic CM=Chrome-Moly

D=Acetal EPDM=Ethylene Propylene Diene Monomer FBR=Fiber FCM=Forged Chrome-Moly FPM=Fluorocarbon NAB=Nickel Aluminum Bronze

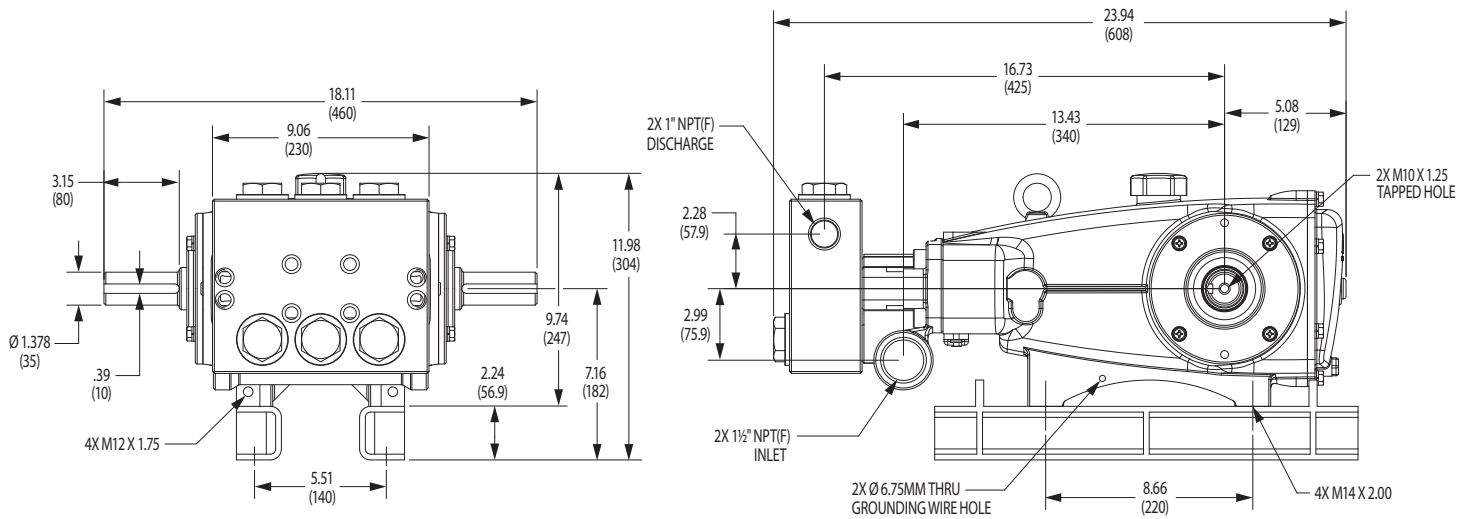
NBR=Medium Nitrile (Buna-N) NBRs=Buna, Silicone Free NY=Nylon PC=Poly Carbonate PE=Polyethylene POP=Polypropylene

PPG=Glass Filled Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride S=304SS SS=316SS

SSHB=316SS/High Strength STCP=Steel/Chrome Plated STG=Special Blend PTFE White

STL=Steel STZP=Steel/Zinc Plated TNM=Special High Strength

**Kits – NBR, FPM (.0110), listed on page 4.**



Models: 3570, 3570S

## SEAL KITS

One (1) seal kit required per pump

| PUMP MODEL         | NBR (STD)     | FPM (.0110)   | EPDM (.0220)  |
|--------------------|---------------|---------------|---------------|
| 3570, 3570C, 3570S | <b>76841*</b> | <b>76842*</b> | <b>76843*</b> |

| ITEM (Included in Seal Kits) |       |       |        | DESCRIPTION                       | QTY |
|------------------------------|-------|-------|--------|-----------------------------------|-----|
| 97                           | 11345 | 11375 | 701490 | O-Ring, Plunger Retainer          | 3   |
| 104                          | 43875 | 44826 | 701656 | O-Ring, Adapter                   | 3   |
| 106                          | 44098 | 44827 | 48244  | Seal, Low-Pressure with SS-Spring | 3   |
| 112                          | 11379 | 14183 | 701491 | O-Ring, Inlet Manifold            | 3   |
| 123                          | 12391 | 13266 | 701657 | O-Ring, V-Packing Spacer          | 3   |
| 127                          | 44608 | 44829 | 44608  | V-Packing                         | 6   |
| 155                          | 48860 | 20137 | 701492 | O-Ring, V-Packing Spacer          | 3   |
| 156                          | 48362 | 48362 | 48362  | Backup Ring, V-Packing Spacer     | 3   |

\* Review material codes for individual items (STG may be used as an alternative)

## VALVE KITS

Two (2) valve kits required per pump

| PUMP MODEL         | NBR (STD)    | FPM (.0110)  | EPDM (.0220) |
|--------------------|--------------|--------------|--------------|
| 3570, 3570C, 3570S | <b>76794</b> | <b>76831</b> | <b>76869</b> |

| ITEM (Included in Valve Kits) |        |        |        | DESCRIPTION             | QTY |
|-------------------------------|--------|--------|--------|-------------------------|-----|
| 162                           | 48363  | 48363  | 48363  | Backup Ring, Valve Seat | 3   |
| 163                           | 26142  | 14330  | 701493 | O-Ring, Discharge Seat  | 3   |
| 164                           | 133052 | 133052 | 133052 | Seat, Valve             | 3   |
| 166                           | 43932  | 43932  | 43932  | Valve                   | 3   |
| 167                           | 133053 | 133053 | 133053 | Spring                  | 3   |
| 168                           | 44728  | 44728  | 44728  | Retainer, Spring        | 3   |
| 170                           | 44729  | 44729  | 44729  | Washer, Spring          | 3   |
| 172                           | 89827  | 11747  | 701494 | O-Ring, Valve Plug      | 3   |
| 173                           | 48364  | 48364  | 48364  | Backup Ring, Valve Plug | 3   |

### ⚠ CAUTIONS AND WARNINGS

All high-pressure systems require a primary pressure regulating device (e.g. regulator, unloader) and a secondary pressure relief device (e.g. 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/dynamic-literature/cautions-and-warnings](http://www.catpumps.com/dynamic-literature/cautions-and-warnings) or can be requested directly from Cat Pumps.

### WARRANTY

View the Limited Warranty online at [www.catpumps.com/literature/cat-pumps-limited-warranty](http://www.catpumps.com/literature/cat-pumps-limited-warranty)