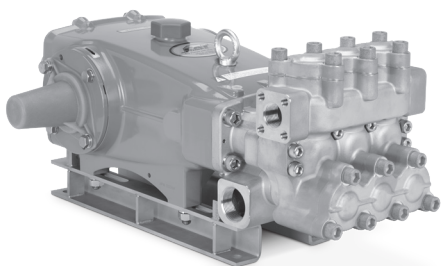


DATA SHEET

36 FRAME PLUNGER PUMP



Duplex Stainless Model: 3642X



Model 3642X Shown
(Shaft protector included, mounting rails sold separately)

FEATURES

- Innovative X-Series high-pressure packings offer up to three times the lifespan of our standard packings.
- Cast duplex stainless steel inlet and discharge manifolds are more resilient than 316 stainless steel when pumping high-salinity water.
- Advanced connecting rods and plunger rod materials optimize the drive end's performance for continuous-duty applications.
- Delrin plunger sleeves provide enhanced separation between the packing spring and the ceramic plunger, providing a longer operational life for both plungers and packings.
- High-strength valve plate cover design eliminates the need for threaded stainless steel valve plugs, making servicing easier.
- Machined duplex stainless steel valves and seats ensure a long lifespan when pumping high-salinity water.
- High-strength coated screws help reduce the risk of galling while preventing corrosion in harsh environments.

SPECIFICATIONS	U.S. Measure	Metric Measure
Flow	45 gpm	170 lpm
Pressure Range	100–1000 psi	6.9–69 bar
Pump RPM*	765 rpm	765 rpm
Inlet Pressure Range	Flooded to 70 psi	Flooded to 4.8 bar
Max. Liquid Temp. (NBR)	140° F	60° C
Bore	1.772"	45 mm
Stroke	1.890"	48 mm
Crankcase Capacity	4.2 qts	4 l
Inlet Ports (2)	1½" NPT(F)	1½" 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 lbs	62.5 kg
Dimensions	25.35 x 18.11 x 10.28"	644 x 460 x 261 mm

* Pump minimum is 100 RPM.

DETERMINING THE PUMP RPM	$\frac{\text{Rated gpm}}{\text{Rated rpm}} = \frac{\text{Desired gpm}}{\text{Desired rpm}}$
DETERMINING THE REQUIRED HP	$\frac{\text{hp}}{\text{(Electric Brake)}} = \frac{\text{gpm} \times \text{psi}}{1460}$
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.

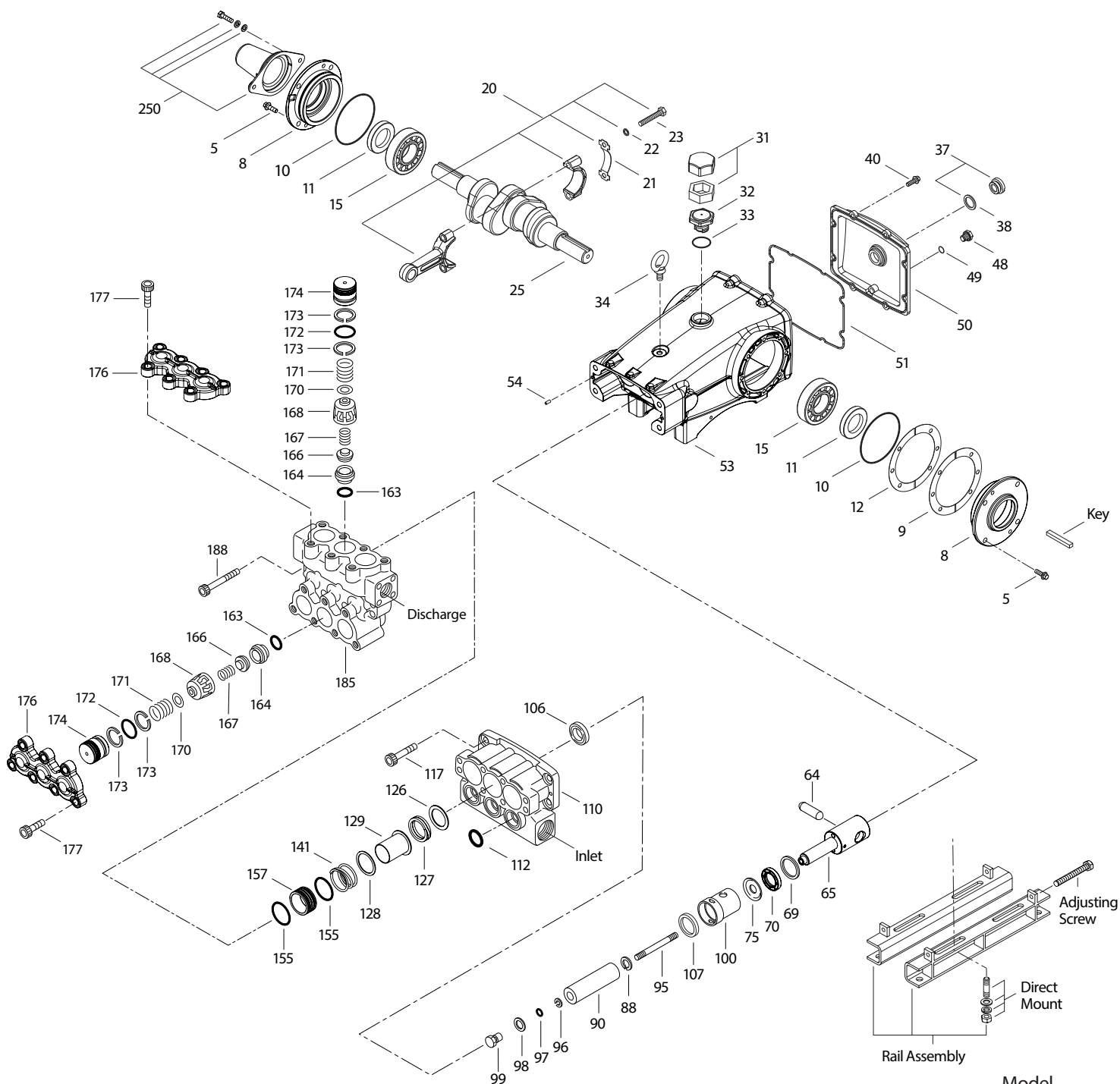
PARTS LIST

ITEM	PART NUMBER	MATL	DESCRIPTION	QTY
5	96049	S	Screw, HH Sems (M10 x 25) (See Tech Bulletin 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	2
15	29326	STL	Bearing, Roller	2
20	126725	BZ R	Assembly, Connecting Rod (Includes: 21, 22, 23) (See Tech Bulletin 074)	3
21	126749	STCP R	Washer, Locking (M10)	3
22	126593	STCP R	Shim, Washer (M10.5 x 1.5)	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 Polyurethane 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, HH 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, Rear	1
51	16612	NBR	O-Ring, Rear Cover	1
53	134784	ALE	Crankcase Assembly (Includes: 54)	1
54	27488	S	Pin, Guide	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	3
90	46806	CC	Plunger (M45 x 145)	3
95	89778	SS	Stud, Plunger Retainer (M10 x 145)	3
96	20189	PTFE	Backup Ring, Plunger Retainer	3
97	11345	NBR	O-Ring, Plunger Retainer	3
98	44085	SS	Gasket, Plunger Retainer	3
99	670149	SSD	Retainer, Plunger (M10) (See Tech Bulletin 074)	3
100	44119	PPG	Retainer, Seal	3
106	48384	NBR	Seal, Low-Pressure with SS-Spring	3
107	48380	D	Spacer, Low-Pressure Seal	3
110	670151	SSD	Manifold, Inlet	1
112	18688	NBR	O-Ring, Inlet Manifold	3
117	44585	S	Screw, HSH (M14 x 40) (See Tech Bulletin 074)	4
126	670238	PVDF	Backup Ring, Packing	3
127	670237	PFB	Packing, Square	3
128	670236	SSD	Washer, Spring	3
129	670239	D	Sleeve, Plunger	3
141	670231	SS	Spring, Coil, Large	3
155	17784	NBR	O-Ring, Packing, Spacer	6
157	670154	SSD	Spacer, Packing	3
163	26143	NBR	O-Ring, Seat	6
164	670157	SSD	Seat	6
166	670158	SSD	Valve	6
167	44109	SS	Spring	6
168	44728	PVDF	Retainer, Spring	6
170	670159	SSD	Washer, Spring	6
171	44644	SS	Spring, Coil	6
172	89827	NBR	O-Ring, Valve Plug	6
173	48364	D	Backup Ring, Valve Plug	12
174	670225	SSD	Plug, Valve	6
176	129759	SSD	Plate, Valve	2
177	32393	STZF	Screw (M14 x 35) (See Tech Bulletin 074)	14
185	670107	SSD	Manifold, Discharge	1
188	89981	S	Screw, HSH (M12 x 70) (See Tech Bulletin 074)	8
250	855042	POP	Protector, Shaft with Two (2) Screws, Lockwashers and Washers	1

R Components comply with RoHS Directive. For additional technical information see www.catpumps.com/literature/tech-bulletins.
MATERIAL CODES (Not Part of Part Number): ABS=ABS Plastic AL=Aluminum ALE=Aluminum Epoxy BZ=Bronze CC=Ceramic CM=Chrome-Moly
D=Acetal FBR=Fiber FCM=Forged Chrome-moly NBR=Medium Nitrile (Buna-N) NBRS=Buna, Silicone Free PC=Polycarbonate PE=Polyethylene
PFB= Proprietary Fiber Blend POP=Polypropylene PPG=Glass Filled Polypropylene PTFE=Pure Polytetrafluoroethylene PVDF=Polyvinylidene Fluoride
S=304SS SS=316SS SSD=Duplex Stainless Steel SSHB=316SS/High Strength Brass STCP=Steel/Chrome Plated
STL=Steel STZF=Steel/Zinc Flake Coated STZP=Steel/Zinc Plated

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

EXPLODED VIEW



Model
3642X
September 2025

OPTIONAL PARTS AND ACCESSORIES

PART	DESCRIPTION	QTY
34021	Key (M10 x 8 x 70)	1
76514	Mount, Rail Assembly (S) (Includes: 34039)	1
34039	Mount, Direct (S)	1
990013	Hub, "B", 35 mm (STL)	1
80540	Screw, Adjusting (M12 x 100)	2
34314	Kit, Oil Drain (3/8" x 48") (Not Shown)	1

SERVICE PARTS

PART	DESCRIPTION	QTY
32542	Kit, Seal, NBR	1
32320	Kit, Valve, NBR	2
6100	Oil, Case (12-21 oz bottles) (Fill to Specific 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 and Installation Kit (Not Shown) (Includes: Oil Seals, Guide Tool, Screws, Washers, Driver)	1
30696	Reverse Pliers (Not Shown)	1
910642	Head, Complete with PFB Packings, NBR LPS and O-Rings	1



One (1) seal kit required per pump

Two (2) valve kits required per pump