

KERR P U M P S

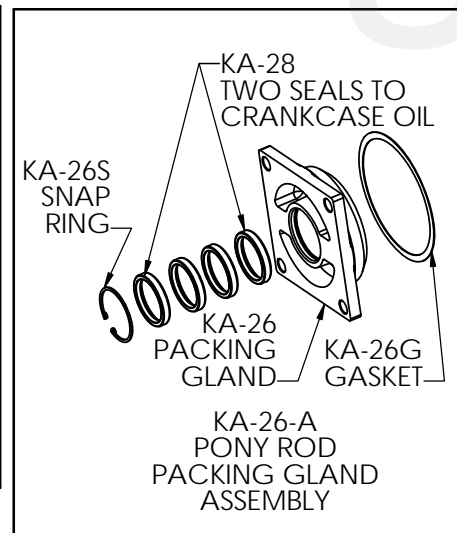
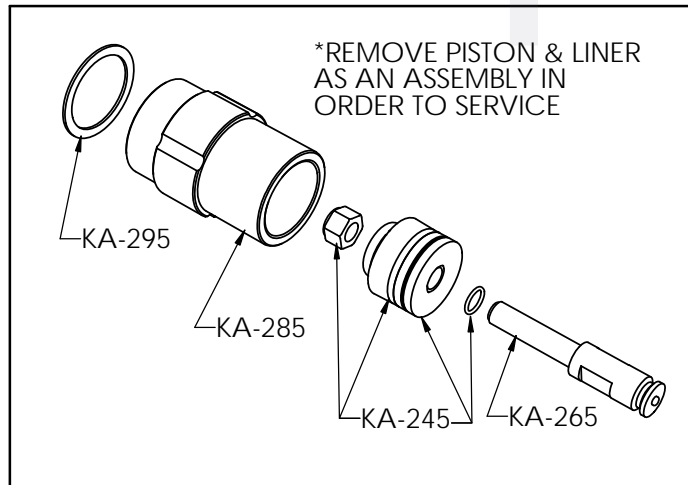
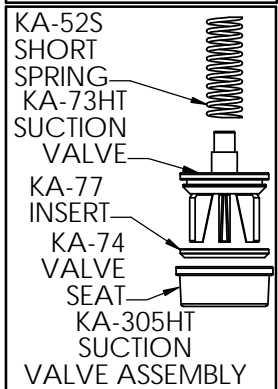
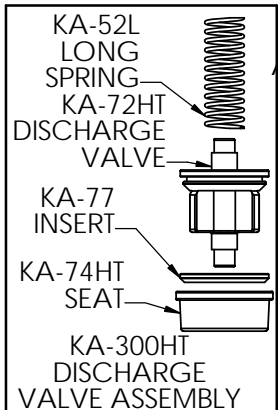
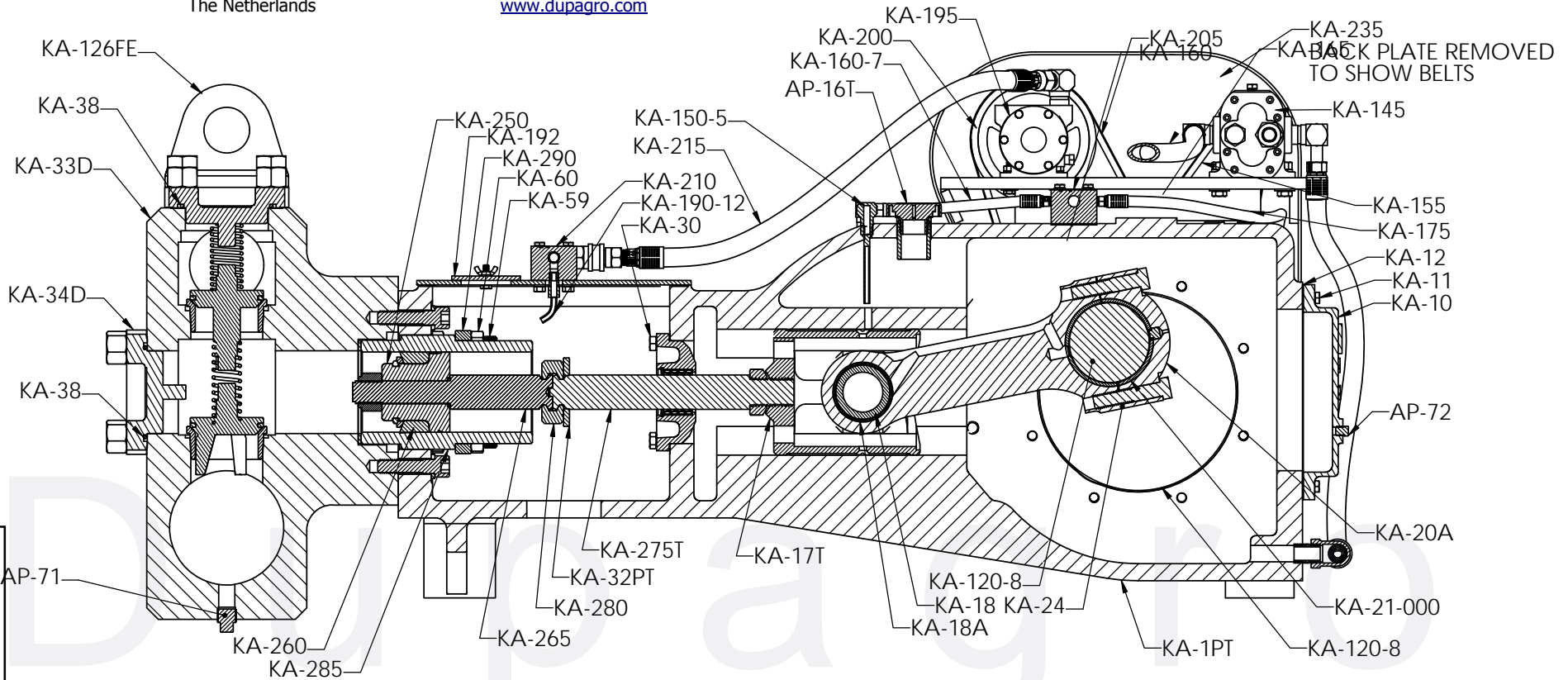
PARTS MANUAL

KA-3500PT PISTON TYPE PUMP



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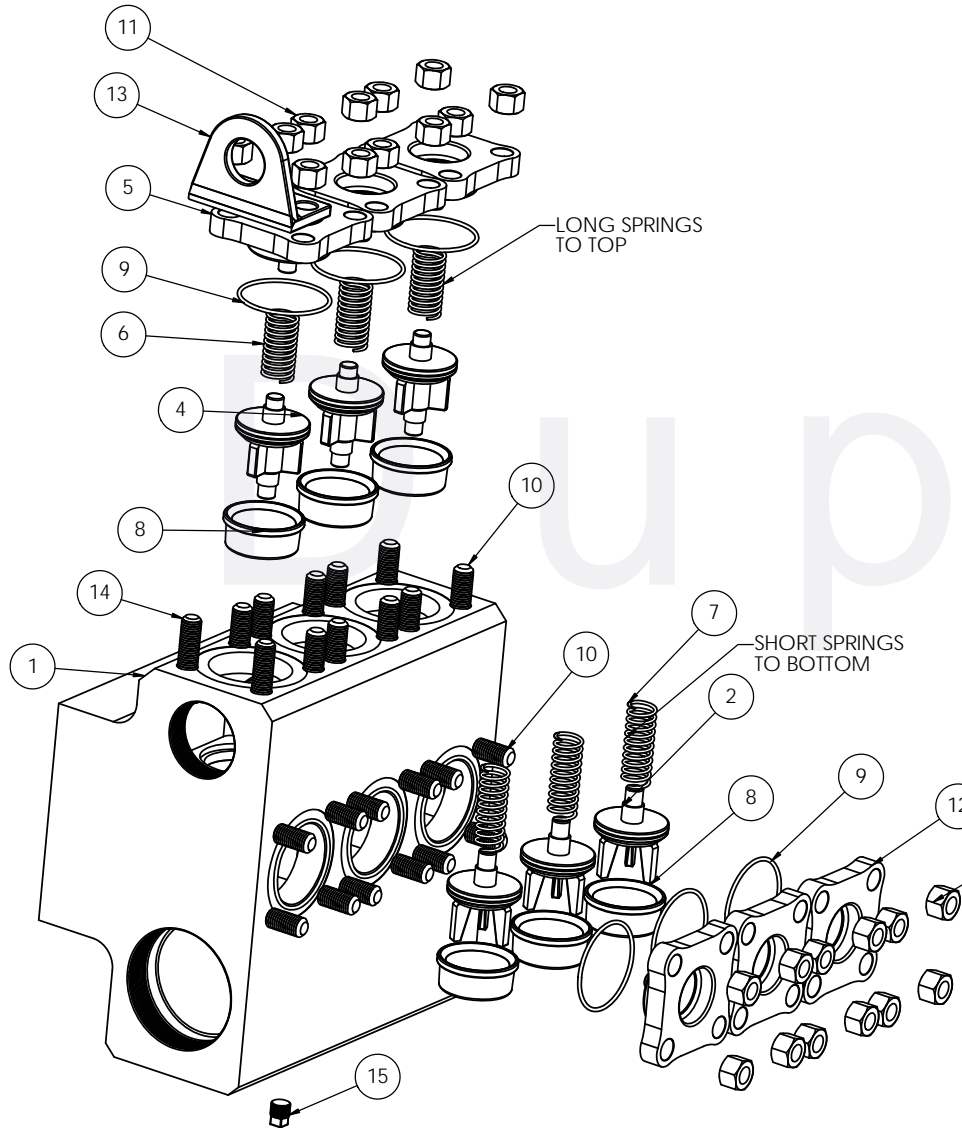
- Parts Page Drawing page 2
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- Piston Assembly, Liner & Pony Rod Detail page 4
- Water Manifold Assembly Detail page 5
- Oil Manifold Assembly Detail page 6
- Parts List page 7-13



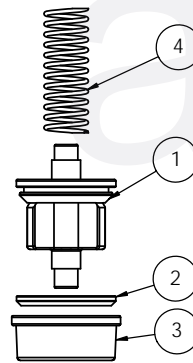
TROUBLESHOOTING GUIDE
for Kerr Pump

- 1) CHECK FOR LEAKING PISTONS
- REPLACE IF NECESSARY
- 2) CHECK FOR PROPER FLUID FLOW TO PUMP
- MINIMUM REQUIREMENTS 3" SUCTION HOSE NO MORE THAN 50' LONG WITH 30 PSI OF CONTINUOUS PRESSURE FEEDING PUMP
- 3) REMOVE VALVE COVER CAPS AND INSPECT VALVES & VALVE SEATS FOR FOREIGN OBJECTS AND WEAR
- REPLACE IF NECESSARY

KA-3500PT



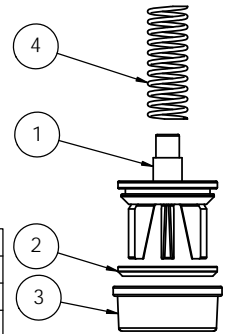
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	KA-33D	FLUID END, VESSEL ONLY (DUCTILE)
2	3	KA-73HT	SUCTION VALVE, HEAT TREATED, A/R WITH INSERT
3	6	KA-77	ABRASIVE RESISTANT VALVE INSERT
4	3	KA-72HT	DISCHARGE VALVE, HEAT TREATED, A/R WITH INSERT
5	3	KA-34D	TOP COVER CAP (DUCTILE)
6	3	KA-52L	VALVE SPRING (DISCHARGE) (LONG)
7	3	KA-52S	VALVE SPRING (SUCTION) (SHORT)
8	6	KA-74HT	VALVE SEAT, HEAT TREATED, A/R
9	9	KA-38	O-RING COVER CAP
10	22	KA-36	COVER CAP STUD
11	24	KA-37	COVER CAP STUD NUT
12	3	KA-35D	END COVER CAP (DUCTILE)
13	1	KA-126FE	FLUID END LIFTING EYE
14	2	KA-36B	COVER CAP BRACKET STUD
15	1	AP-71	FLUID END DRAIN PLUG


KA-300

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	KA-72HT	DISCHARGE VALVE, HEAT TREATED, A/R WITH INSERT
2	1	KA-77	ABRASIVE RESISTANT VALVE INSERT
3	1	KA-74HT	VALVE SEAT, HEAT TREATED, A/R
4	1	KA-52L	VALVE SPRING (DISCHARGE) (LONG)

KA-300
KA-305

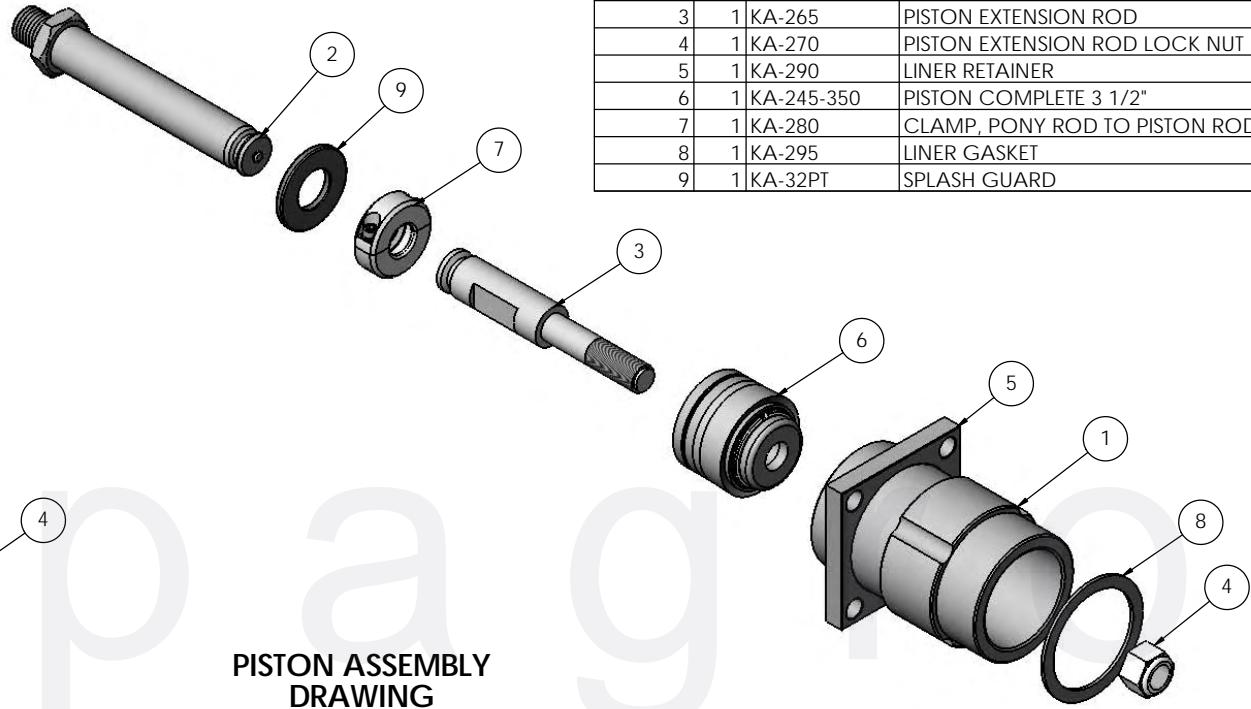
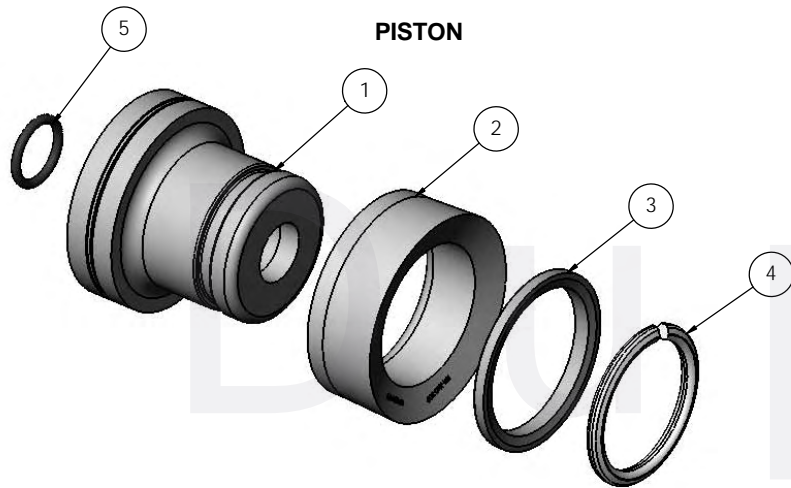
ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	KA-73HT	SUCTION VALVE, HEAT TREATED, A/R WITH INSERT
2	1	KA-77	ABRASIVE RESISTANT VALVE INSERT
3	1	KA-74HT	VALVE SEAT, HEAT TREATED, A/R
4	1	KA-52S	VALVE SPRING (SUCTION) (SHORT)


KA-305

KA-260-350 PISTON ASSEMBLY

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	KA-250-350	PISTON, BODY ONLY, 3 1/2"
2	1	KA-263-350	PISTON CUP
3	1	KA-261-350	PISTON CUP RETAINER PLATE
4	1	KA-262	PISTON CUP SNAP RING
5	1	KA-246	PISTON O-RING

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	1	KA-285-350	LINER, 3 1/2" HEAT TREATED
2	1	KA-275T	PONY ROD, PISTON PUMP TYPE
3	1	KA-265	PISTON EXTENSION ROD
4	1	KA-270	PISTON EXTENSION ROD LOCK NUT
5	1	KA-290	LINER RETAINER
6	1	KA-245-350	PISTON COMPLETE 3 1/2"
7	1	KA-280	CLAMP, PONY ROD TO PISTON ROD
8	1	KA-295	LINER GASKET
9	1	KA-32PT	SPLASH GUARD

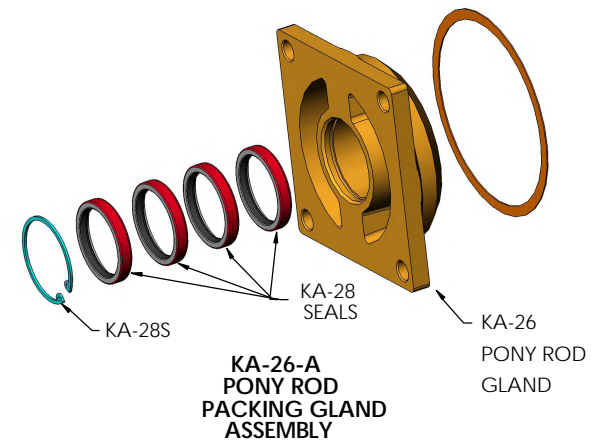
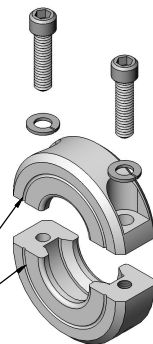


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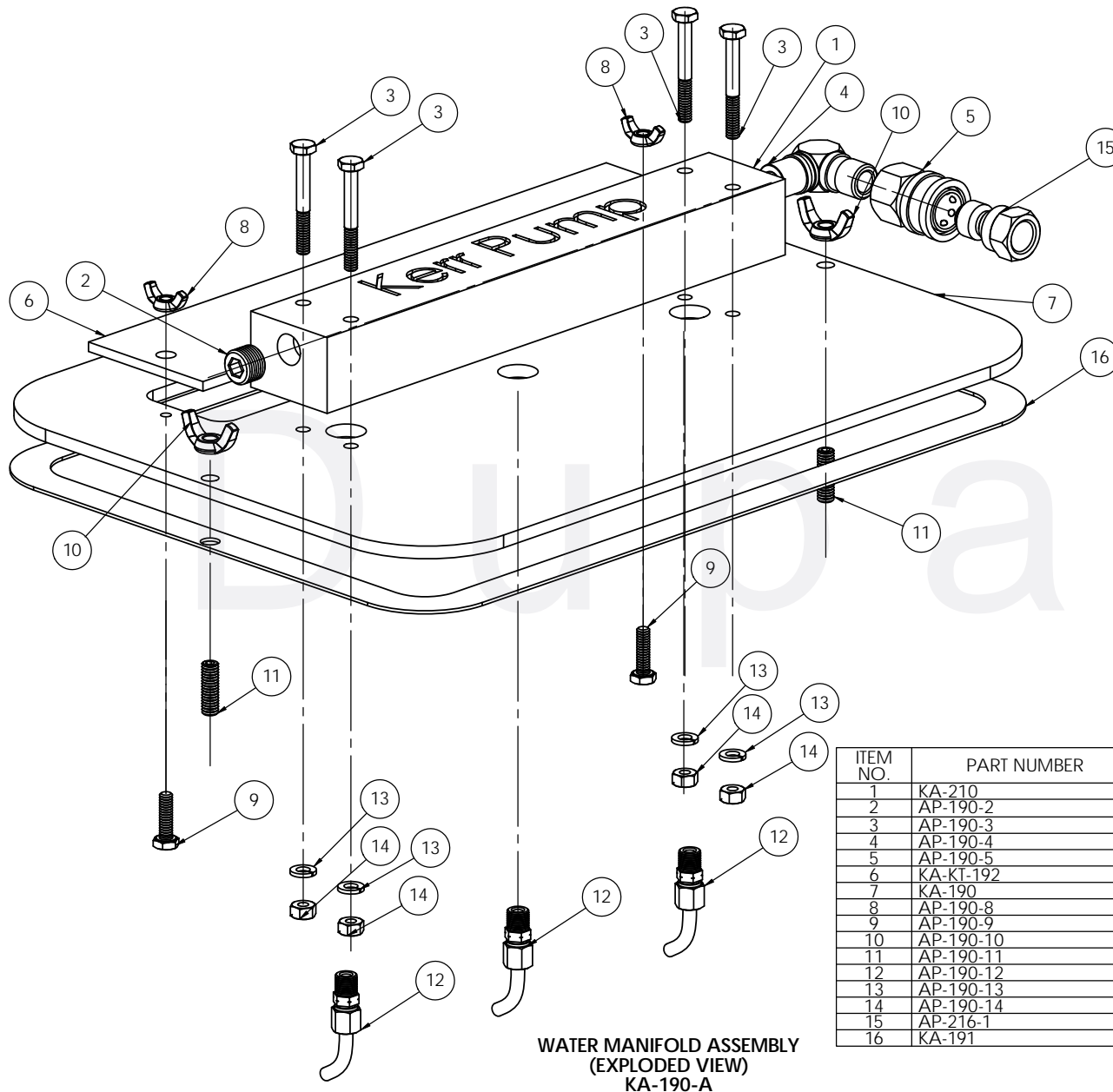
MATCH GROOVE

DO NOT MIX WITH ANOTHER KA-280-A

KA-280-A



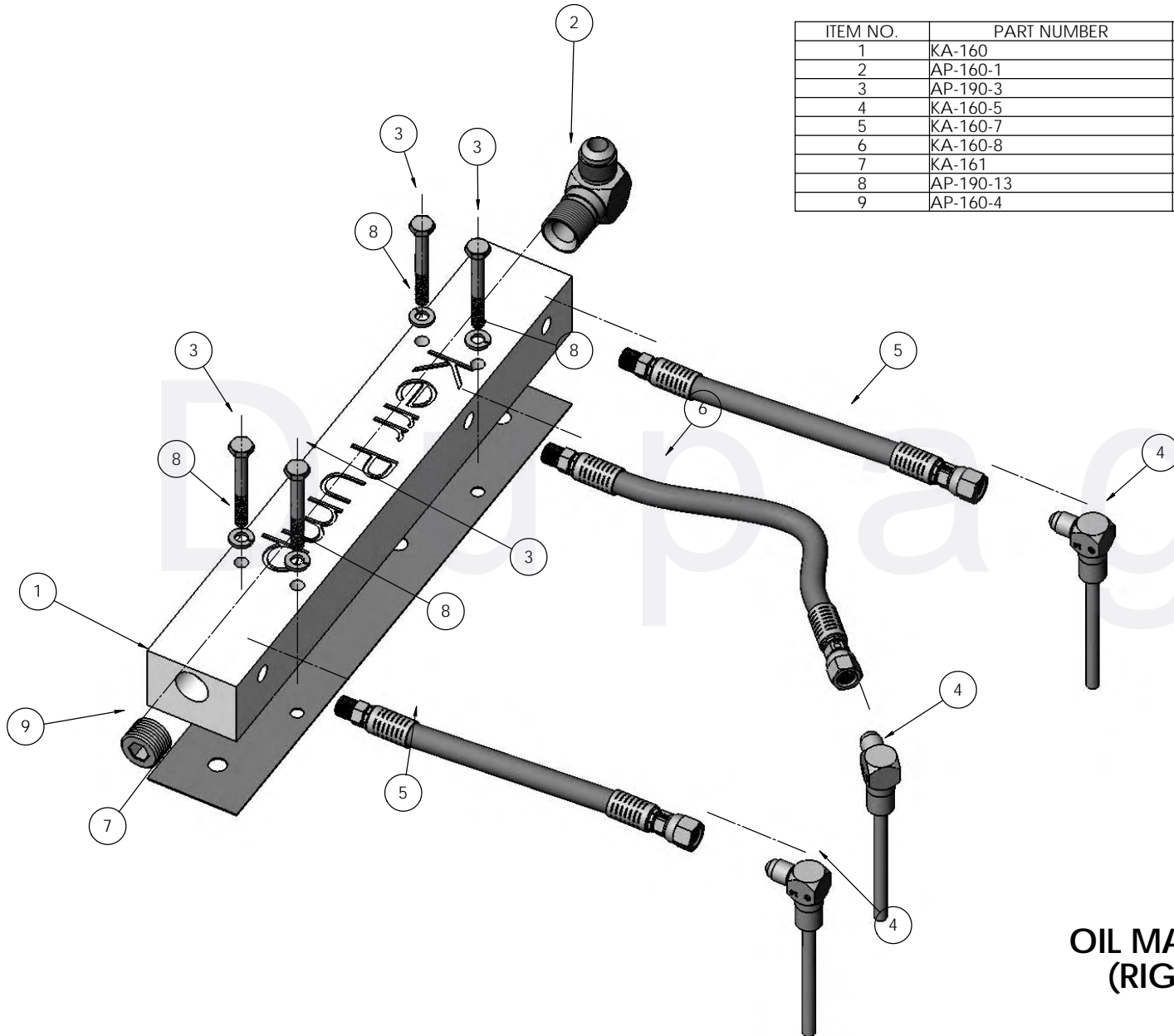
REV B: 05-09-00 ADDED ITEMS 15 & 16;
 REV C: 01-17-07 UPDATED PART NO'S.



**WATER MANIFOLD ASSEMBLY
 (EXPLODED VIEW)
 KA-190-A**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	KA-210	WATER MANIFOLD	1
2	AP-190-2	3/8 npt WATER MANIFOLD PLUG	1
3	AP-190-3	WATER MANIFOLD / OIL MANIFOLD BOLT	4
4	AP-190-4	WATER MANIFOLD 90 DEGREE FITTING	1
5	AP-190-5	3/8 QUICK COUPLING	1
6	KA-KT-192	PISTON CHAMBER COVER SIGHT GLASS	1
7	KA-190	PISTON CHAMBER COVER	1
8	AP-190-8	PISTON CHAMBER COVER INSPECTION GLASS WING NUT	2
9	AP-190-9	PISTON CHAMBER COVER INSPECTION GLASS CAPSCREW	2
10	AP-190-10	PISTON CHAMBER COVER WING NUT	2
11	AP-190-11	PISTON CHAMBER COVER CAPSCREW	2
12	AP-190-12	FORCED DRIP LUBE TUBE	3
13	AP-190-13	1/4 LOCK WASHER	4
14	AP-190-14	1/4-20UNC NUT	4
15	AP-216-1	3/8" QUICK CONNECT	1
16	KA-191	PISTON CHAMBER COVER GASKET	1

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	KA-160	OIL MANIFOLD	1
2	AP-160-1	JIC MALE ELBOW 1/2	1
3	AP-190-3	WATER MANIFOLD / OIL MANIFOLD BOLT	4
4	KA-160-5	FITTING, CROSSHEAD OIL INJECTOR	3
5	KA-160-7	5 1/2" (450 DEG) SS TEFLON HOSE	2
6	KA-160-8	6 1/2" (450 DEG) SS TEFLON HOSE	1
7	KA-161	OIL MANIFOLD GASKET FOR KA-KT	1
8	AP-190-13	1/4 LOCK WASHER	4
9	AP-160-4	1/2-NPT PIPE PLUG SOCKET TYPE INTERNAL HEX	1



**OIL MANIFOLD ASSEMBLY
 (RIGHT-HAND DRIVE)
 KA-160RH-A**

Kerr KA-3500PT Piston Type Pump

Part Number	Description	# Req
KA-1PT	Pump Case	1
KA-3	Crankshaft Oil Seal	1
KA-6	Bearing Housing Capscrews	9
KA-6B	Bearing Housing Capscrews 2	3
KA-7	Bearing Housing Gaskets	2
KA-8-015	Main Bearing Adjusting Shims .015	
KA-8-010	Main Bearing Adjusting Shims .010	
KA-8-005	Main Bearing Adjusting Shims .005	
KA-9	Main Bearings	2
KA-10	Pan Cover	1
KA-11	Pan Cover Capscrews	14
KA-12	Pan Cover Gasket	1
AP-16T	Breather Cap (Oil Filler) Threaded Style	1
AP-16	Breather Cap (Oil Filler)	1
KA-17T	Crosshead Tapered	3
KA-18	Wrist Pin	3
KA-18A	Wrist Pin Bushing	3
KA-19	Wrist Pin Set Screws & Nut	3
KA-20A	Connecting Rod (Inserted Both Ends)	3
KA-20	Connecting Rod Only (No Inserts - Requires inserts both ends)	3
KA-21-000HRL	Connecting Rod Insert Bushing (Std)	3
KA-21-030	Connecting Rod Insert Bushing (.030)	3
KA-21-015	Connecting Rod Insert Bushing (.015)	3
KA-21-000	Connecting Rod Insert Bushing (Std)	3
KA-22	Connecting Rod Capscrew	6
KA-24	Connecting Rod Shims (Laminated)	6
KA-26M-A	Pony Rod Gland Assembly (Pony Rod Gland, Snap Ring, 2 Seals, & 1 Wiper)	3
KA-26M	Pony Rod Gland Snap Ring Type for KA-29 Seal Kit	3
KA-26S	Pony Rod Gland Snap Ring	3
KA-26G	Pony Rod Gland Gasket	3
KA-26A	Pony Rod Gland Assembly (Pony Rod Gland, Snap Ring, Seals)	3
KA-26	Pony Rod Seal Gland Snap Ring Type	3
KA-28	Pony Rod Seal (4 Seals per Set)	3 sets
KA-29	Pony Rod Seal Kit (2 Seals & 1 Wiper per Set)	3
KA-29SG-3	Installation Tool, Seal Guard Wiper Driver	1
KA-30	Pony Rod Gland Capscrews SS	12

Kerr KA-3500PT Piston Type Pump

Part Number	Description	# Req
KA-32PT	Pony Rod Splash Guard	3
KA-33-2500	3 to 2 1/2 Bushing	1
KA-33-500	3 to 1/2 Bushing	1
KA-33-2000	3 to 2 Bushing	1
KA-33DM	Fluid End Vessel Only (Ductile)	1
KA-34D	Top Cover Cap (Ductile)	3
KA-35D	End Cover Cap (Ductile)	3
KA-36B	Cover Cap Bracket Stud	2
KA-36	Cover Cap Stud	22
KA-37	Cover Cap Stud Nut	24
KA-38N	Cover Cap O-Ring, Nitrile	6
KA-38A	Cover Cap O' Ring (Aflas)	6
KA-42-3	Spring, Disc Valve, Inner	10
KA-52S	Valve Spring (Suction) (Short)	3
KA-52CW	Valve Spring	6
KA-52L	Valve Spring (Discharge) (Long)	3
KA-59T	Fluid End / Liner Retainer Lineup Studs	2
KA-59CS	Fluid End Capscrews	6
KA-59	Fluid End / Liner Retainer Studs	10
KA-60	Stud Nut	24
KA-68MH	Valve Puller, Hydraulic, A/R Type Valve	1
KA-68M-5	O-Ring, Puller	1
KA-68M-5	O-Ring, Puller	1
KA-68M-4	Spacer Washer, Puller	1
KA-68M-3	Head, Puller	1
KA-68M-2	Pin Set, Puller	3
KA-68M-1	Rod, Puller	1
KA-68M	Wing-Guided Seat Tri-Pin Type Puller Ass'y	1
KA-68	Valve Puller Wing Type	1
AP-71	Drain Plug 1/2" Hex Pipe Plug	1
AP-72S	1/8 NPT Oil Level/Stuffing Box Hex Plug (Steel)	3
AP-72SS	1/8 NPT Oil Level/Stuffing Box Hex Plug (Stainless Steel)	3
AP-72AB	1/8 NPT Oil Level/Stuffing Box Hex Plug (AB)	3
KA-72HT	Discharge Valve, Heat Treated, A/R with Insert	3
KA-73HT	Suction Valve, Heat Treated, A/R with Insert	3
KA-74HT	Valve Seat, Heat Treated, A/R	6

Kerr KA-3500PT Piston Type Pump

Part Number	Description	# Req
AP-77T	Valve Insert Tool	1
KA-77HT	Abrasive Resistant Valve Insert (High Temperature)	6
KA-77B	Suction Valve Insert Blue	
KA-77R	Discharge Valve Insert Red	3
KP-85R	Abrasive Resistant Valve Insert Red	10
KA-113PT	KA-3500PT Rebuild Gasket Kit Complete Includes the Following Parts:(1) KA-3, (2) KA-7, (1) KA-12, (3) KA-26G, (3) KA-28, (3) KA-32PT, (6) KA-38, (2) KA-127, (1) KA-161, (1) KA-191, (3) KA-295, (1) AP-331	1
KA-120-8TP-2	Crankshaft, Splined Hydraulic Drive TP-2	1
KA-120-8	Crankshaft, Splined Hydraulic Drive 21 Tooth Spline #8 & #9	1
KA-120-6	Crankshaft, Splined Hydraulic Drive 40 Tooth Spline	1
KA-125-8	Bearing Housing, Hydraulic Drive # 8	1
KA-125-6	Bearing Housing, Hydraulic Drive # 6	1
KA-126FE	Fluid End Lifting Eye	1
KA-126BH	Bearing Cap Lifting Eye	1
KA-127	#8 & #9 Auburn Housing Gasket	1
KA-130TP	Bearing Housing, Oil Pump Lubrication System	1
KA-130	Bearing Housing, Extension Shaft Side	1
AP-132	Extension Shaft	1
KA-133-1	O-Ring, Adapter Sleeve	1
KA-133TP	Adapter Sleeve, Oil Pump Lubrication System	1
KA-134-3	Socket Head Capscrews, Pump Oil Lubrication System	4
KA-134-2	O'Ring, Pump Oil Lubrication System	1
KA-134-1	Bushing 1/2 NPT to 1-1/2 NPT Steel	2
KA-134	Pump, Oil Lubrication System	1
AP-135	Oil Seal, Bearing Housing Extension Shaft	1
KA-140RH	Bracket, Oil and Water Pumps (Right-Hand)	1
KA-140LH	Bracket, Oil and Water Pumps (Left-Hand)	1
AP-145	Oil Pump, 1/2 Cast Iron	1
AP-150	Sheave, Oil Pump	1
KA-155	Belt, Oil Pump	1
AP-160-6	Fitting, Female Swivel (Supplied with hose)	3
AP-160-5	Fitting, Crosshead Oil Injector	3
AP-160-4	Oil Manifold Plug	1
AP-160-3	Male Pipe Rigid 1/4 X 1/8 (Supplied with hose)	5
AP-160-2	90 Degree Tube Fitting 1/2 (Supplied with hose)	1
KA-160	Oil Manifold	1

Kerr KA-3500PT Piston Type Pump

Part Number	Description	# Req
AP-160-1	Oil Manifold 90 Degree Elbow	1
KA-161	Oil Manifold Gasket	1
KA-165TP	Oil Line, Pump Manifold	1
KA-165	Oil Line, Pump Manifold	1
KA-170TP	Oil Line, Pump to Oil Sump	1
KA-170	Oil Line, Pump to Oil Sump	1
KA-175	Oil Line, Manifold to Bearing Housing	2
KA-180	Oil Line, Manifold to Crosshead	3
AP-190-14	1/4-20 UNC Nut	4
AP-190-13	1/4 Lock Washer	4
AP-190-12	Fitting, Water Jet	3
AP-190-11	Piston Chamber Cover Setscrew	2
AP-190-10	Piston Chamber Cover Wing Nut	2
AP-190-9	Piston Chamber Cover Inspection Glass Capscrew	2
AP-190-8	Piston Chamber Cover Inspection Glass Wing Nut	2
AP-190-5	Water Manifold Quick Coupling	1
AP-190-4	Water Manifold 90 Degree Fitting	1
AP-190-3	Water Manifold / Oil Manifold Bolt	4
AP-190-2	Water Manifold Plug	1
KA-190	Piston Chamber Cover	1
KA-190A	Piston Chamber Cover Spray Unit Complete	1
KA-191	Piston Chamber Cover Gasket	1
KA-192	Piston Chamber Cover Inspection Glass	1
AP-195	Water Pump, Bronze	1
AP-197	Water Pump Repair Kit (Nitrile)	1
AP-200-175	Sheave, Water Pump (KA use belt KA-205-037)	1
AP-200-260	Sheave, Water Pump (KA use belt KA-205-038)	1
AP-200-520	Sheave, Water Pump (KA use belt KA-205-039)	1
AP-205-037	Belt, Water Pump (KA use sheave KA-200-175)	1
AP-205-038	Belt, Water Pump (KA use sheave KA-200-260)	1
AP-205-039	Belt, Water Pump (KA use sheave KA-200-520)	1
KA-210	Water Manifold	1
KA-215	Line, Water Pump to Manifold	1
AP-216	3/8 Quick Connect	1
KA-220	Line, Water Pump to Supply Tank	1
KA-225	Line, Water Manifold to Piston Cover	3

Kerr KA-3500PT Piston Type Pump

Part Number	Description	# Req
KA-230-16	Lock Washer, Pump Oil Lubrication System	4
AP-230-9	Sheave Bushing	1
AP-230	Sheave, Crankshaft Drive to Pumps	1
AP-235-50	Rotation Label	1
AP-235-32	90 Degree Tube Fitting 1/4 (Supplied with hose)	1
AP-235-31	SAE JIC Male Connector 1/4 x 1/8	2
AP-235-27	3/8-16 UNC x 3/8 Setscrew	2
AP-235-24	3/8-16 UNC Hex Head Nut	2
AP-235-23	3/8 Lock Washer	2
AP-235-22	3/8 Flat Washer	2
AP-235-21	3/8-16 UNC x 1 1/4	2
AP-235-19	1/4 Flat Washer	2
AP-235-17	1/4-20 UNC x 1 1/4 Capscrew	2
KA-235RH	Belt Guard, Pump Drive (For Right-Hand Pump)	1
KA-235LH	Belt Guard, Pump Drive (For Left-Hand Drive)	1
KA-235MRH	Guard & Bracket Assy (For Right-Hand Pump)	1
KA-235MLH	Guard & Bracket Assy (For Left-Hand Pump)	1
KA-245-400	Piston Complete 4	3
KA-245-350MU	Piston Complete 3 1/2 (Molded Urethane)	3
KA-245-300	Piston Complete 3	3
KA-245-350	Piston Complete 3 1/2	3
KA-246	Piston O' Ring	3
KA-248	Piston Snap Ring Installation Tool	1
KA-250-400	Piston, Body Only 4	3
KA-250-350	Piston, Body Only 3 1/2	3
KA-250-300	Piston, Body Only 3	3
KA-260-400	Piston Cup Kit 4.0(cup, retainer plate, snap ring)	3
KA-260-350	Piston Cup Kit 3.5 (cup, retainer plate, snap ring)	3
KA-260-300	Piston Cup Kit 3 (cup, retainer plate, snap ring)	3
KA-265	Piston Extension Rod	3
KA-270	Piston Extension Rod Lock Nut	3
KA-275	Pony Rod Piston Pump Type	3
KA-276	Installation Tool for Pony Rod Seal	1
KA-277	Installation Wrench, Pony Rod	1
KA-280	Clamp, Pony Rod to Piston Rod	3
KA-281	Capscrew Socket Head	6

Kerr KA-3500PT Piston Type Pump

Part Number	Description	# Req
KA-282SS	Lock Washer, Pony Rod to Piston Rod Clamp SS	10
KA-285-400KER-A	Liner Assembly 4 (Piston complete, rod, locknut, liner kerramic, gasket)	3
KA-285-400CH-A	Liner Assembly 4 (Piston complete, rod, locknut, liner chrome, gasket)	3
KA-285-350KER-A	Liner Assembly 3 1/2 (Piston complete, rod, locknut, liner kerramic, gasket)	3
KA-285-350CH-A	Liner Assembly 3 1/2 (Piston complete, rod, locknut, liner chrome, gasket)	3
KA-285-350CER-A	Liner Assembly 3 1/2 (Piston complete, rod, locknut, liner ceramic, gasket)	3
KA-285-300CH-A	Liner Assembly 3 (Piston complete, rod, locknut, liner chrome, gasket)	3
KA-285-300CER-A	Liner Assembly 3 (Piston complete, rod, locknut, liner, gasket)	3
KA-285-400KER	Liner, 4 Kerramic	3
KA-285-400CH	Liner, 4 Chrome	3
KA-285-350KER	Liner, 3 1/2 Kerramic	3
KA-285-350CH	Liner, 3 1/2 Chrome	3
KA-285-350CER	Liner, 3 1/2 Ceramic	3
KA-285-300CER	Liner, 3 Ceramic	3
KA-285-300CH	Liner, 3 Chrome	3
KA-290	Liner Retainer	3
KA-295	Liner Gasket	3
KA-300HT	Discharge Valve Complete, A/R Heat Treated (KA-72HT, KA-74HT & KA-52L)	3
KA-305HT	Suction Valve Complete, A/R Heat Treated (KA-73HT, KA-74HT & KA-52S)	3
AP-306	Valve Seat Seating Tool	1
AP-320	Flow Meter	1
AP-324-9-5	# 9 Planetary Gear Assembly 5.50:1	1
AP-324-8-7	# 8 Planetary Gear Assembly 7.07-1	1
AP-324-8-6	# 8 Planetary Gear Assembly 6.0-1	1
AP-324-8-4	# 8 Planetary Gear Assembly 4.86-1	1
KA-325	Planetary Adapter Kit 6 to 8	1
KA-326	Spline Adapter (21-40)	1
KA-327	Spline Adapter Spacer	1
AP-330-2	Snap Ring, SAE C 4 Bolt Drive Assembly 1-1/2 Male Input Shaft	1
AP-330-1	Oil Seal, SAE C 4 Bolt Drive Assembly 1-1/2 Male Input Shaft	1
AP-330B	Bearings, SAE C 4 Bolt Drive Assembly 1-1/2 Male Input Shaft	2
AP-330S	Input Shaft, SAE C 4 Bolt Drive Assembly 1-1/2 Male Input Shaft	1
AP-330H	Housing, SAE C 4 Bolt Drive Assembly 1-1/2 Male Input Shaft	1
AP-330	SAE C 4 Bolt Drive Assembly 1-1/2 Male Input Shaft	1
AP-331	O'Ring, #8 Auburn Input Drive Assembly	1
AP-351	Oil Level Sight Glass	1

Kerr KA-3500PT Piston Type Pump

Part Number	Description	# Req
AP-352	Oil Level Sight Plug	1
KA-500HT	Valve Ass'y, Complete A/R Caged (KA-501HT, KA-502HT, KA-504, KA-506, KP-85 & KA-42-3)	3
KA-501HT	Seat, Valve, Heat Treated	5
KA-502HT	Valve w/Insert, Heat Treated	5
KA-504HT	Cage, Valve	5
KA-506	Valve Seat O'Ring	6
KA-550	Cage Wrench	1
KA-701	Oil Cooler w/110 V Fan Motor	1
KA-900	Special Tool Kit consists of (KA-68M, AP-77T, KA-248, KA-276, KA-277, KA-306)	1

All prices and part numbers are subject to change without prior notice.