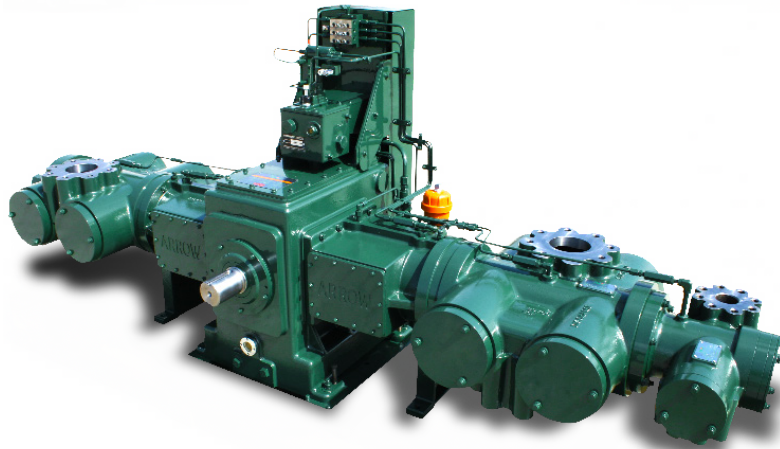




**Original Equipment.
Engineered Solutions.**

VRS-2

PARTS MANUAL



ARROW ENGINE COMPANY
2301 E. Independence St., Tulsa, OK 74110
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VRS2-PARTS-JAN2024

VRS-2

REPLACEMENT PARTS MANUAL

**Very Reliable Super Compressor
Two-throw**

VRS2-PARTS-JAN2024

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1 Definitions

1.1 Recommended Spare Parts

1.2 6-month Spare Parts

Six-month spares are intended to satisfy parts required for start-up spares, and consists primarily of gaskets, O-rings, and common wear parts. As valves are sometimes damaged from debris in the piping during start-up, Arrow recommends having a full set of replacement valves on hand. Arrow also has available valve repair kits.

1.3 1-year Spare Parts

One-year spare parts include the 1-year plus the 6-month spare parts. We have recommended some parts such as pumps, belts, divider block, etc., not because these parts are expected to wear out in 1 year, but because they could be damaged due to neglect, abuse, or abnormal wear and tear from extreme or dirty operating conditions.

1.4 2-year Spare Parts

Two-year spare parts include the 2-year parts plus the 1-year parts plus the 6-month parts. This is a more complete list of parts recommended as though the unit is in a *remote area* with limited replacement parts access, or for operating in a critical service. We have recommended some major parts such as a crankshaft and connecting rods not because these parts are expected to fail in 2 years, but they could be damaged due to neglect, abuse, or abnormal wear and tear from extreme or dirty operating conditions.

This list could also be used as a recommended overhaul repair kit to be used when a complete overhaul becomes necessary.



2 Special Tools

2.1 Recommended Special Tools

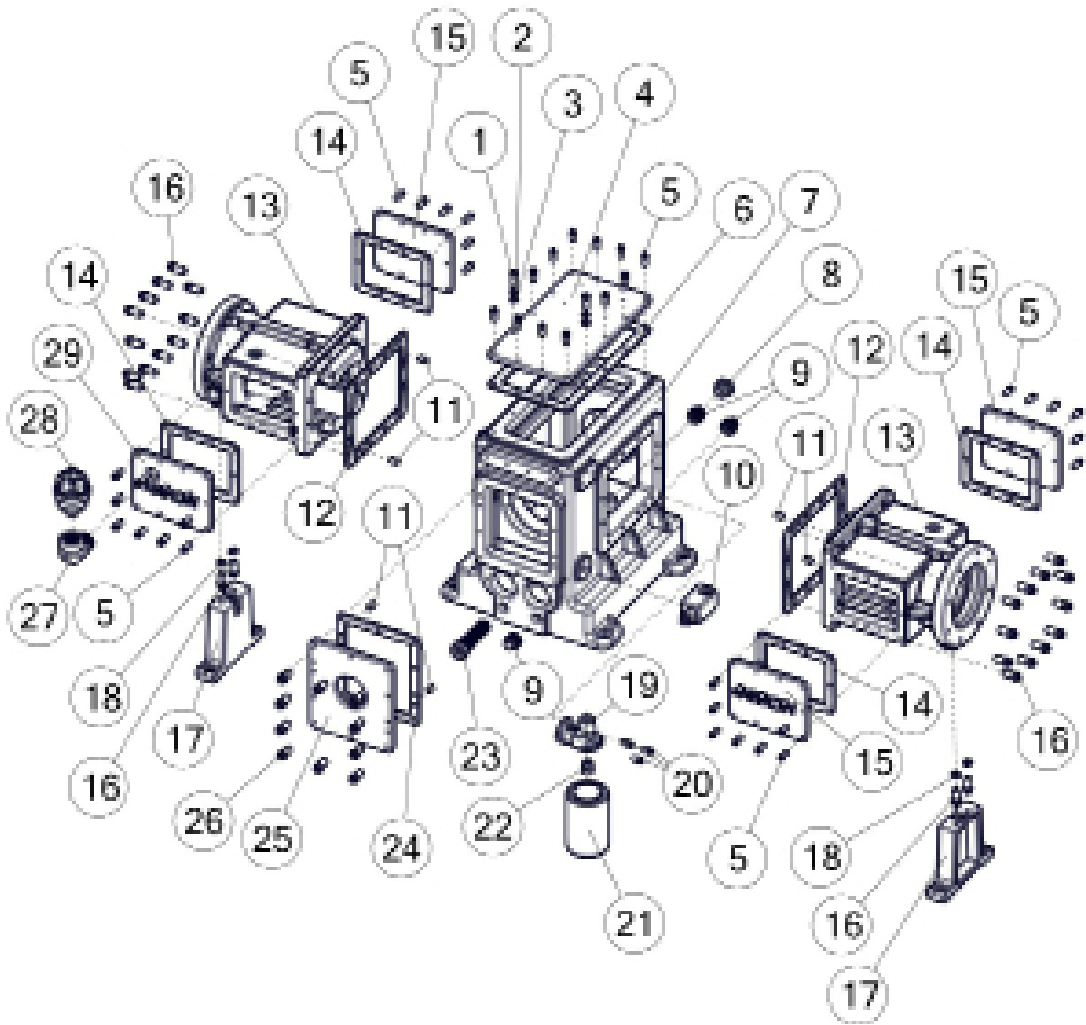
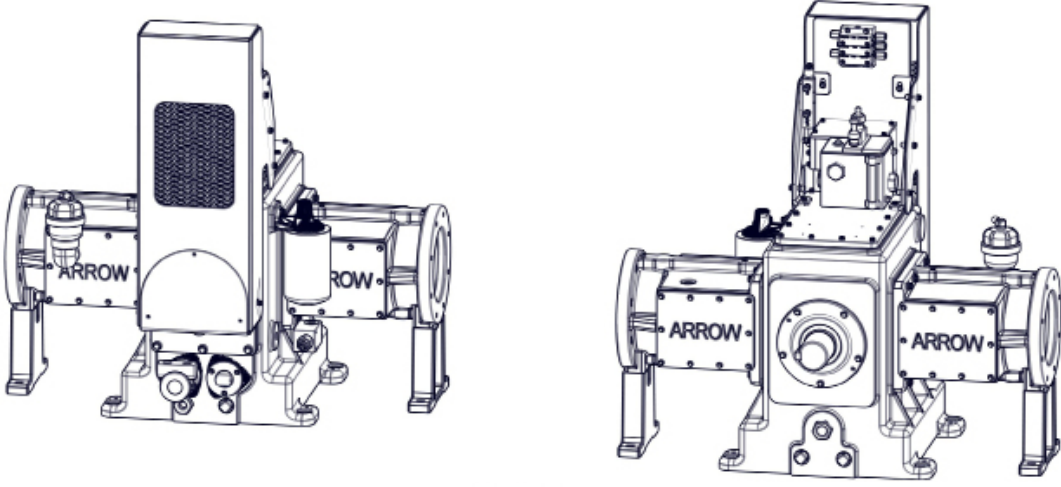
Special tools may be ordered as follows:

1. Tool box (a complete set of recommended tools)
2. Individual recommended tools
3. Individual optional tools
4. A combination of individual recommended tools and individual optional tools

SPECIAL TOOLS AND TOOL BOX					
NO.	PART NO.	DESCRIPTION	QUANTITY		
			STD. ISSUE	REC. TOOL	OPT. TOOL
	VRS29400A	TOOL BOX (includes all of the following)			
1	VRC29400	TOOL BAG, ARROW COMPRESSION PRODUCTS		1	
2	VRC21140	ADAPTER, BAR-OVER, CRANKSHAFT	1	1	
3	VRC29490	PISTON NUT ADAPTER		1	
4	VRC29492	PISTON ROD ENTERING SLEEVE		1	
5	VRS29482	OIL SEAL ENTERING SLEEVE		1	
6	VRC29496	2" JAM NUT WRENCH		1	
7	VRC29499	PISTON JAM NUT BAR		1	
8	VRC29463	TOOL, VALVE INSTALLATION, 2.25 - 4.0" CYLINDERS		1	
9	VRC29464	TOOL, VALVE INSTALLATION, 4.5 - 8.0" CYLINDERS		1	
10	VRS28310	FILTER, OIL FRAME		1	

3 Frame

3.1 Frame Parts – Frame, Covers, Gaskets, Oil Strainer, Sight Glass, and Plugs

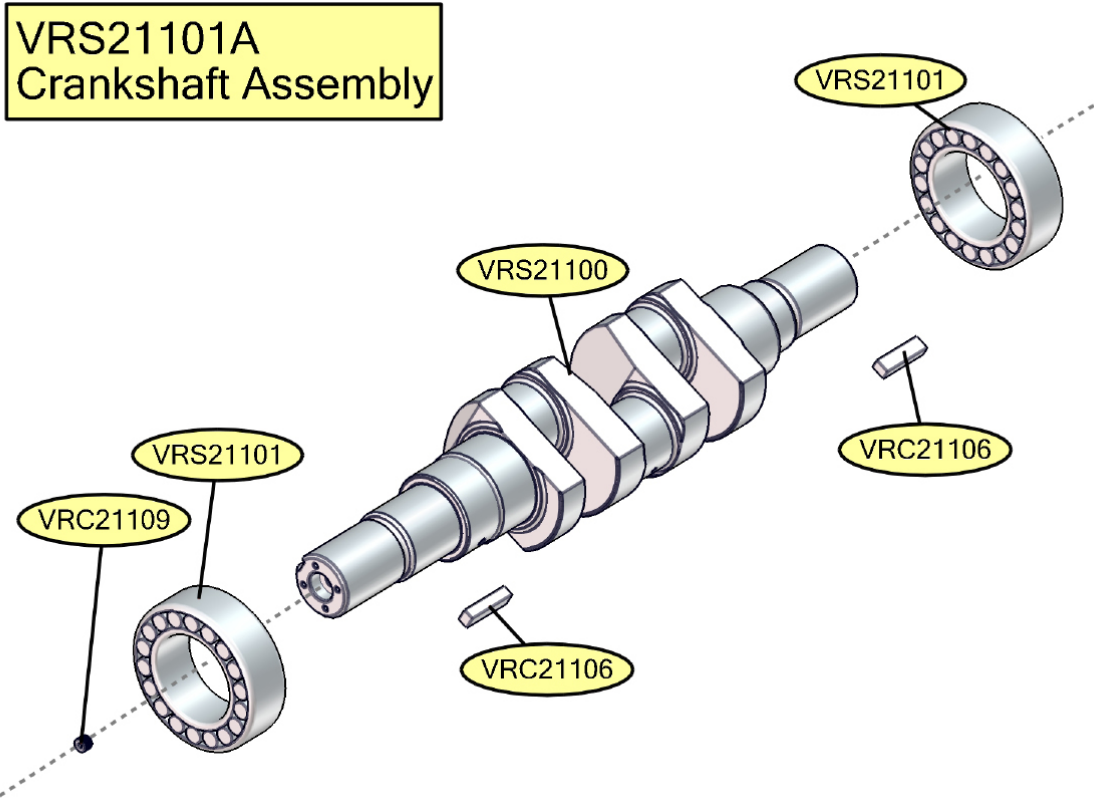


NOTE: Vibracon options for prime mover: SM20CS-QPQ or SM20E-CS. No Item No. reference needed.

3.2 Frame Parts

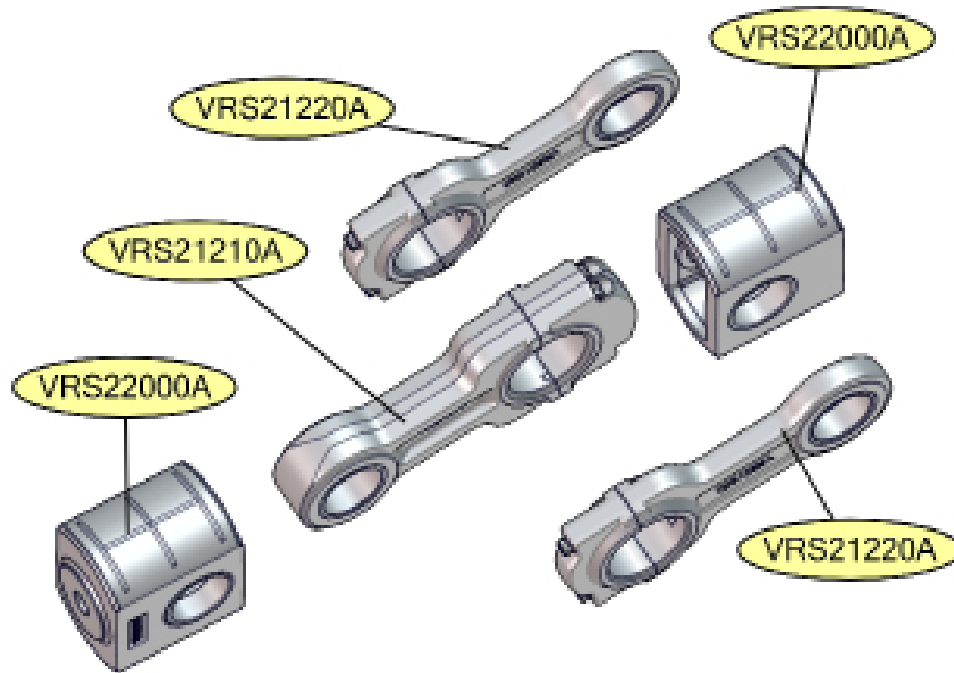
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
1	7A-5/16-18X1 1/4	CAPSCREW HEX HEAD	2			
2	1A-5/16	WASHER, LOCK, 5/16"	2			
3	1N-5/16	WASHER, FLAT, 5/16"	2			
4	VRS21310	COVER PLATE, FRAME TOP	1			
5	VRC21327	SCREW 12-POINT 5/16 -18 X 1	52			
6	VRS21315	GASKET, COVER PLATE, FRAME TOP	1	1	1	1
7	VRS21020	FRAME TWO-THROW VRS-2 COMPRESSOR	1			
8	VRC21400	SIGHTGLASS, FRAME OIL LEVEL	1			
9	VRC21519	PLUG, PIPE, 1"-NPT	3			
10	VRC28350C	VALVE, RELIEF, OIL PRESSURE	1			1
11	VRS21506	PIN DOWEL DISTANCE PIECE	6			
12	VRS22221	GASKET, DIST PC TO FRAME	2	2	2	2
13	VRS22220	DISTANCE PIECE, VRS-2	2			
14	VRS21325	GASKET, COVER PLATE, FRAME SIDE	4	4	4	4
15	VRS21320	COVER PLATE, DISTANCE PIECE SIDE	3			
16	VRC25067	SCREW, 12-POINT 1/2-13 X 2	28			
17	VRS22230	SUPPORT, DISTANCE PIECE	2			
18	VRC25025	WASHER, LOCK, 1/2" HIGH COLLAR	4			
19	VRC28320	BRACKET, MOUNTING, FRAME OIL FILTER	1			
20	VRC28327	SCREW 12-POINT 5/16 - 18 X 3/4	3			
21	VRS28310	FILTER, OIL, FRAME	1	2	2	2
22	VRS28325	ADAPTER, BRACKET, FILTER	1			
23	VRC28340	STRAINER, OIL, FRAME (1" NPT)	1			
24	VRS28015	GASKET, COVER PLATE HOUSING	1	1	1	1
25	VRS28010	COVER PLATE, HOUSING, LUBE OIL DRIVE	1			
26	VRC21117	SCREW, 12-POINT 3/8-16X1	10			
27	VRC21419	ELBOW, 1-1/4", STREET 90	1			
28	VRC21410	BREATHER, FRAME VENT	1			1
29	VRS21321	COVER PLATE, DISTANCE PIECE SIDE, WITH BREATHER	1			

3.3 Crankshaft Parts



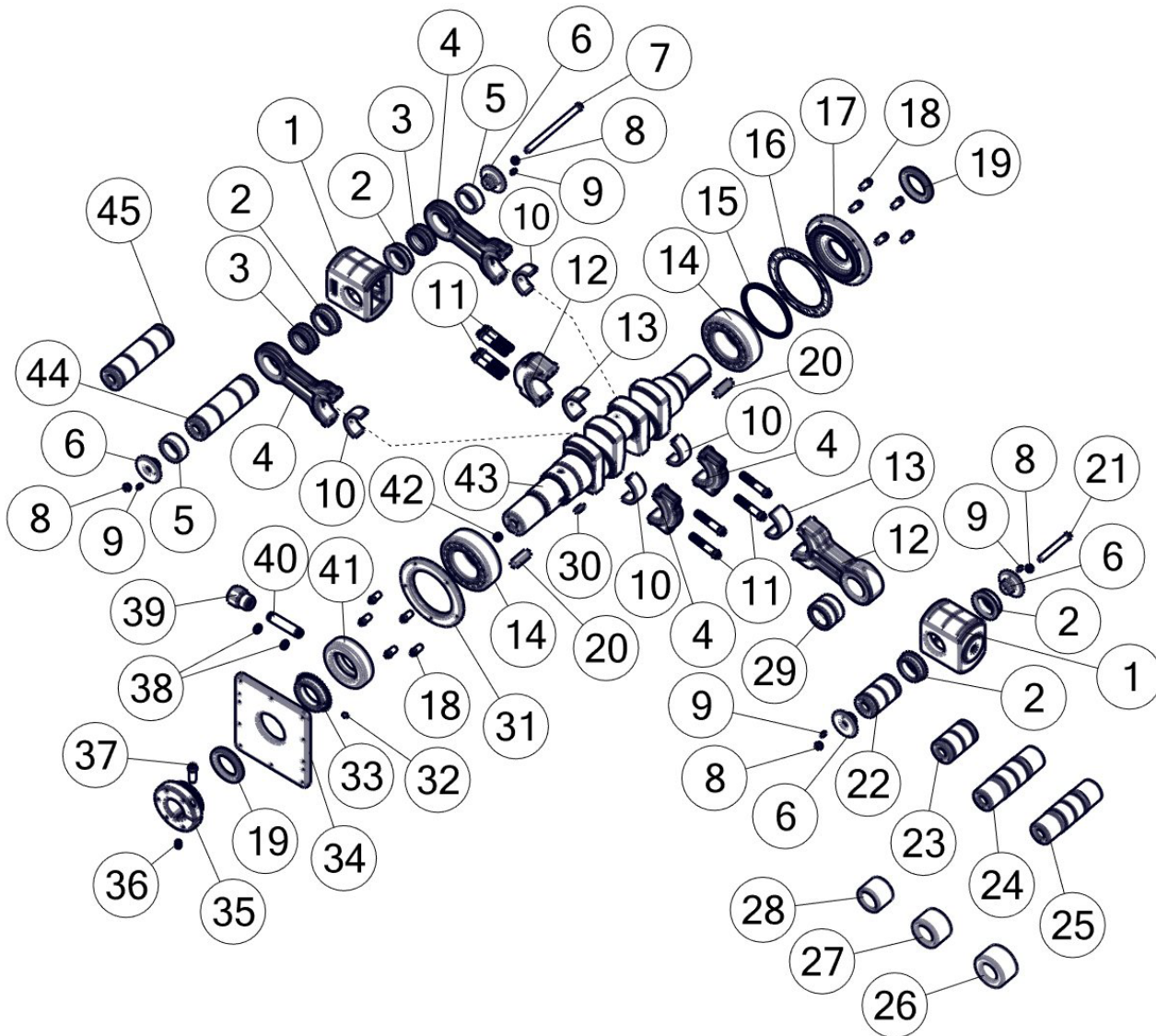
CRANKSHAFT ASSEMBLY						
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
VRS21101A	VR-S21101A	CRANKSHAFT, VRC-2, ASSEMBLY WITH MAIN BEARINGS	1			1
	VRS21106	KEY, CRANKSHAFT	2			
	VRS21101	BEARING, CRANKSHAFT MAIN	2			
	VRS21100	CRANKSHAFT, VRS-2 COMPRESSOR	1			
	VRC21109	PLUG, CRANKSHAFT 1/4" NPT	1			

3.4 Frame, Crosshead, and Connecting Rod Assemblies

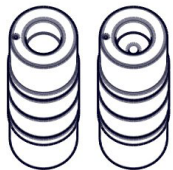


FRAME ASSEMBLIES		
PART NO.	DESCRIPTION	QTY.
VRS22000A	CROSSHEAD, VRS-2 ASSEMBLY WITH BUSHINGS	2
VRS21020A	FRAME, TWO-THROW, VRS-2 COMPRESSOR ASSEMBLY (NOT SHOWN)	1
VRS21220A	ROD, CONNECTING, LIGHT ASSEMBLY (WITH BUSHING AND SCREWS)	2
VRS21210A	ROD, CONNECTING, HEAVY, ASSEMBLY (WITH BUSHING AND SCREWS)	1

3.5 Crankshaft, Crosshead, and Connecting Rod Parts

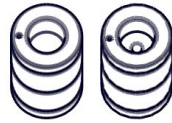


VRS22135 VRS22130



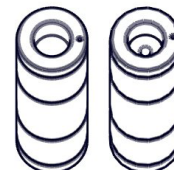
7.85# 10.15#

VRS22115 VRS22110



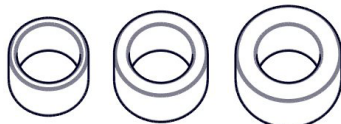
4.15# 4.90#

VRS22125 VRS22120



8.40# 10.75#

VRS22301 VRS22302 VRS22303



1.10# 2.59# 4.10#

HEAVY ROD

HEAVY ROD

LIGHT ROD

CROSSHEAD PINS & WEIGHTS OPTIONS

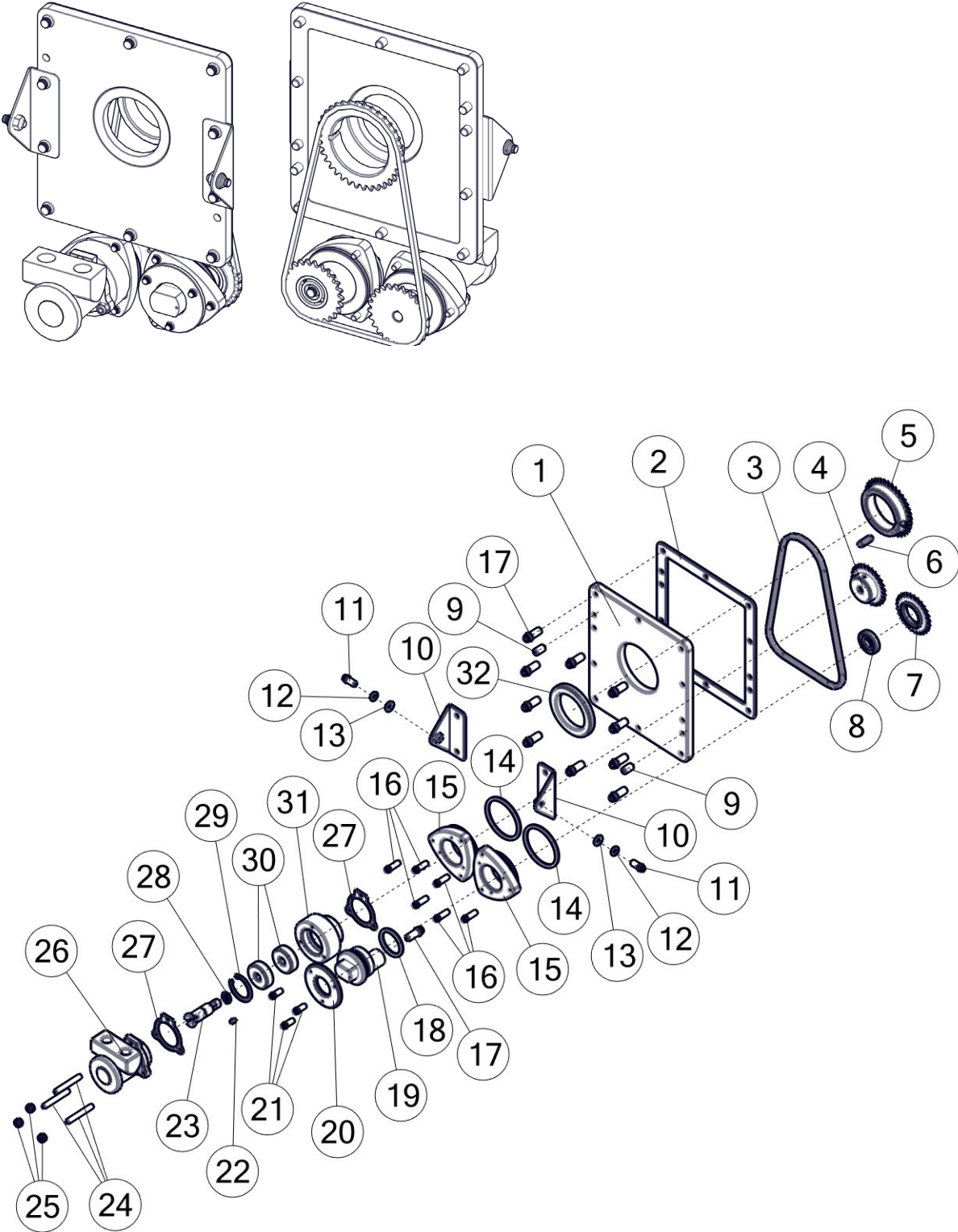
SINGLE AND DOUBLE CONNECTING ROD ASSEMBLY

ITEM NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
1	VRS22000A	CROSSHEAD ASSEMBLY (WITH BUSHINGS AND BABBIT)	2			2
2	VRS22002	BUSHING CROSSHEAD (INCLUDED WITH CROSSHEAD)	4			
3	VRS21222	BUSHING CONNECTING ROD LIGHT (INCLUDED WITH ROD)	2			
4	VRS21220	ROD, CONNECTING, LIGHT ASSY. WITH BUSHING AND SCREWS	2			2
5	VRS22420	SPACER PIN CROSSHEAD LONG	2			2
6	VRS22200	CAP, RETAINER, CROSSHEAD PIN	4			4
7	VRS22128	BOLT CROSSHEAD PIN RETAINER LONG	1			1
8	VRC22119	NUT 3/8-16 NYLOK	4		4	4
9	VRC22206	PIN ROLL, 1/8X1/2	4			4
10	VRS21221	BEARING CONNECTING ROD LIGHT, SET	2		2	
11	VRS21217	SCREW CONN ROD CAP 12-POINT 1/2"X3-1/4" (INCLUDED W/ROD)	8			
12	VRS21210	ROD, CONNECTING, HEAVY ASSY. WITH BUSHING AND SCREWS	1			1
13	VRS21211	BEARING CONNECTING ROD HEAVY PAIR	1		1	
14	VRS21101	BEARING, CRANKSHAFT MAIN	2			2
15	VRS21114	O-RING RETAINER DRIVE-END	1			1
16	VRS21119	SHIM PACK RETAINER DRIVE-END	1			1
17	VRS21110	RETAINER, BEARING, DRIVE-END	1			
18	VRC21117	SCREW 12-POINT 3/8 - 16 X 1	10			
19	VRS28024	SEAL, OIL, CRANKSHAFT	2	1		2
20	VRC21106	KEY, CRANKSHAFT, ACCESSORY-END	2			2
21	VRS22118	BOLT, CROSSHEAD PIN RETAINER, SHORT	1			1
22	VRS22110	PIN CROSSHEAD SHORT HEAVYWEIGHT 4.90 LBS*	1			
23	VRS22115	PIN CROSSHEAD SHORT LIGHTWEIGHT 4.15 LBS*	1			
24	VRS22135	PIN CROSSHEAD LONG BALANCE LIGHTWEIGHT 7.85 LBS*	1			
25	VRS22130	PIN CROSSHEAD LONG BALANCE HEAVYWEIGHT 10.15 LBS*	1			
26	VRS22303	WEIGHT, CROSSHEAD PIN 2@8.20 LBS EACH**	2			
27	VRS22302	WEIGHT, CROSSHEAD PIN 2@5.18 LBS EACH**	2			
28	VRS22301	WEIGHT, CROSSHEAD PIN 2@2.20 LBS EACH**	2			
29	VRS21212	BUSHING CONNECTING ROD HEAVY (INCLUDED WITH ROD)	1			
30	VRC28206	KEY SQ 1/4 X 1/4 X 1.24 ROUND-END	1			2
31	VRS21120	RETAINER, BEARING, ACCESSORY-END	1			
32	VRC28239	SETSCREW 5/16 - 18 X 1/2 CUP PNT	1			
33	VRS28248	SPROCKET, CRANKSHAFT DRIVE	1			1
34	VRS28010	COVERPLATE, HOUSING/SEAL RETAINER	1			
35	VRS28425	SHEAVE BELT, CYLINDER LUBE PUMP	1			
36	VRC28429	SETSCREW 3/8 - 16 X 3/4 CUP PNT	1			1
37	VRC25017	SCREW 12-POINT 1/2 - 13 X 1-3/4	1			
38	VRS28104	O-RING SLINGER OIL TUBE	2		2	2
39	VRS28130	FITTING, OIL SLINGER TUBE	1			
40	VRS28110	TUBE, OIL, SLINGER	1			
41	VRS28100	SLINGER, OIL, LUBE DRIVE	1			1
42	VRC21109	PLUG, FLUSH 1/4 NPT	1			
43	VRS21100	CRANKSHAFT, VRS-2 COMPRESSOR	1			1
44	VRS22120	PIN CROSSHEAD LONG HEAVYWEIGHT 10-75 LBS*	1			
45	VRS22125	PIN CROSSHEAD LONG LIGHTWEIGHT 8.40 LBS*	1			

* Pins are determined as required to balance opposing throw according to cylinder configuration.

** Weights to be determined by cylinder configuration.

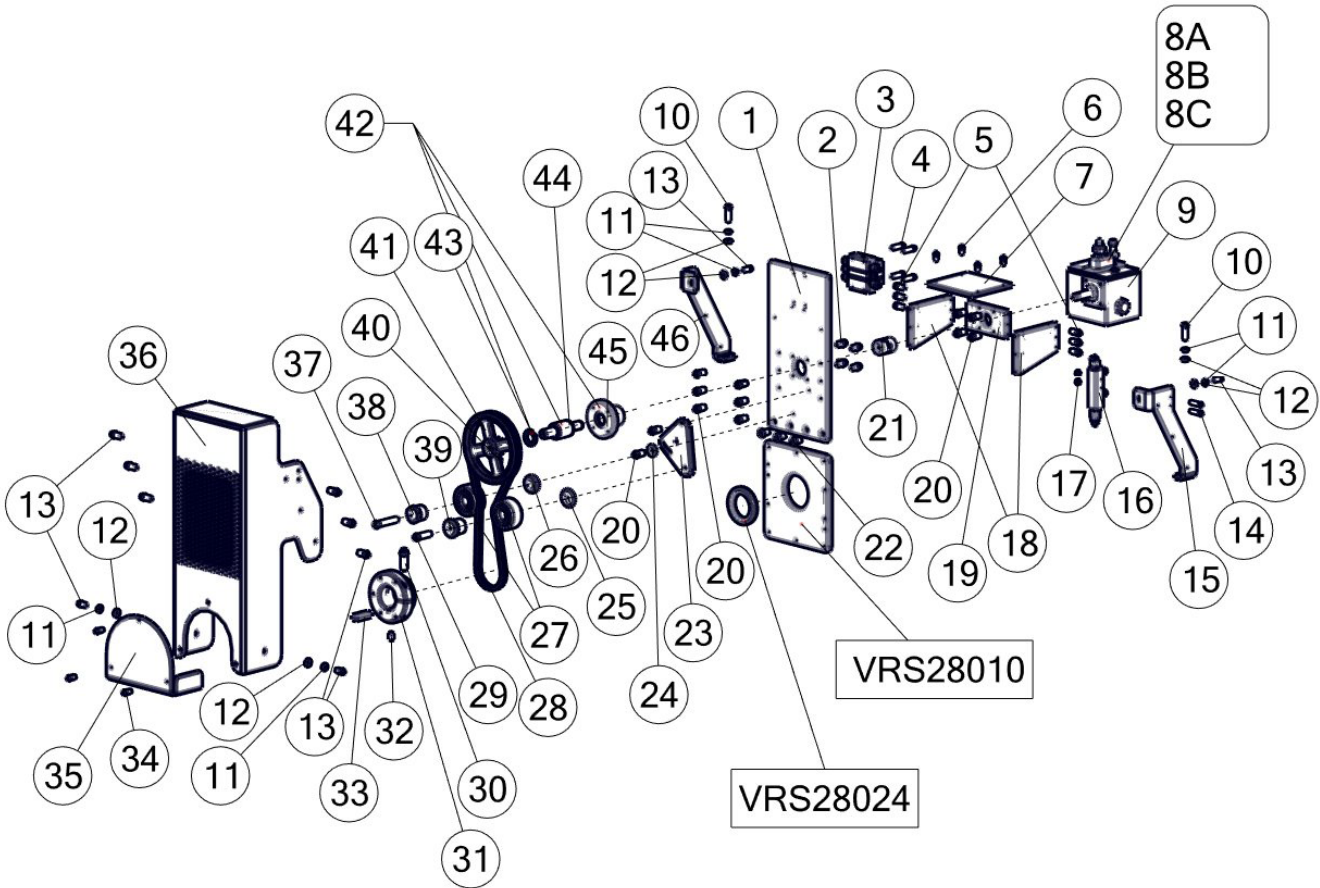
3.6 Lubrication System – Chain Drive



LUBRICATION SYSTEM – CHAIN DRIVE

NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
1	VRS28010	COVER PLATE, HOUSING/SEAL RETAINER	1			
2	VRS28015	GASKET, COVER PLATE, HOUSING	1	1	1	1
3	VRS28200	CHAIN DRIVE ENDLESS RIVETED 86LINKS	1		1	1
4	VRS28232	SPROCKET, DRIVE, FRAME OIL PUMP	1		1	1
5	VRS28248	SPROCKET, CRANKSHAFT DRIVE	1			1
6	VRC28206	KEY SQ 1/4 X 1/4 X 1.24 ROUND-END	1			
7	VRS28220	SPROCKET, IDLER, CHAIN (25 TEETH)	1	1	1	1
8	VRS28251	BEARING, IDLER SPROCKET	1			
9	VRS21506	DOWEL PIN 3/8 X 3/4	2			
10	VRS28482	SUPPORT BELT GUARD	2			
11	VRC28327	SCREW 12-POINT 5/16 - 18 X 3/4	2			
12	1A-5/16	LOCKWASHER PLATED	2			
13	1N-5/16	WASHER FLAT SAE PLATED	2			
14	VRC25504	O-RING, 3.250 OD .125 W	2			2
15	VRS28252	BUSHING, ADAPTER IDLER	2			
16	VRC28557	SCREW 12-POINT 1/4 - 20 X 1	6			
17	VRC21117	SCREW 12-POINT 3/8 - 16 X 1	11			
18	VRS28254	O-RING IDLER CHAIN	1		1	1
19	VRS28250	IDLER, CHAIN, FRAME OIL PUMP	1			
20	VRS28253	CLAMP, IDLER CHAIN	1			
21	VRC28027	SCREW 12-POINT 1/4 - 20 X 3/4	3			
22	104A-#3	KEY WOODRUFF 1/8X1/2	1			
23	VRS28332	SHAFT, PUMP MOUNT, FRAME OIL	1			
24	VRC28337	STUD, PUMP MOUNT, 1/4-20 x 2.5", DOUBLE-END	3			3
25	VRC28559	NUT NYLOK 1/4 - 20	3			3
26	VRC28301	PUMP, OIL, FRAME WITH TANG SHORT SHAFT	1	1	1	1
27	VRC28305	GASKET, PUMP, FRAME OIL	2	1	1	2
28	VRC28334	RING, RETAINING, SMALL, SHAFT, PUMP MOUNT	1			1
29	44999E	SNAP RING FOR THE HW123804	1			1
30	VRC28333	BEARING, SHAFT, PUMP MOUNT	2			2
31	VRC28331	MOUNT, PUMP, FRAME OIL	1			
32	VRS28024	SEAL, OIL, CRANKSHAFT	1	1		2

3.7 Lubrication System – Belt Drive



LUBRICATION SYSTEM – BELT DRIVE

ITEM NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
1	VRS28550	PLATE MOUNTING CYLINDER LUBE PUMP	1			
2	VRC28427	SCREW 12-POINT 3/8 - 16 X 3/4	4			
3	VRC286XX	BLOCK, DIVIDER, CYLINDER LUBE OIL **	1			
4	VRC28607	SCREW 12-POINT 1/4 - 20 X 1-1/2	4			
5	VRC21327	SCREW 12-POINT 5/16 -18 X 1	6			
6	VRC28017	SCREW 12-POINT 1/4 - 20 X 5/8	4			
7	VRC28570	PLATE, TOP, PUMP SUPPORT	1			
8A	VRC28510	PUMP, OIL, CYLINDER LUBE, 3/16" CPI	1*		1	1
8B	VRC28512	PUMP, OIL, CYLINDER LUBE, 1/4" CPI	1*		1	1
8C	VRC28514B	PUMP OIL CYLINDER LUBE 3/8" GRACO	1*		1	1
9	VRC28530B	RESERVOIR PUMP CYLINDER LUBE (WITHOUT PUMP)	1			
10	7A-5/1618X11/4	CAPSCREW HEX HEAD	2			
11	1A-5/16	LOCKWASHER PLATED	6			
12	1N-5/16	WASHER FLAT SAE PLATED	6			
13	VRC28327	SCREW 12-POINT 5/16 - 18 X 3/4	10			
14	VRC28727	SCREW SOCKET HEAD 10 - 32 X 1-1/2	2			
15	VRS28551	SUPPORT, PLATE MOUNTING RIGHT	1			
16	VRC28720	SWITCH, NO-FLOW SAFETY	1			
16A	VRC28721	SWITCH, NO-FLOW SAFETY, EXPLOSION-PROOF	1			
17	VRC28728	NUT 10-32N NYLOK	2			
18	VRC28571	PLATE, SIDE, PUMP SUPPORT	2			
19	VRC28572	PLATE, END, PUMP SUPPORT	1			
20	VRC21117	12D-3/816X1	12			
21	ASA-1653	COUPLING; L070 HUB 1/2 AND 5/8 WITH SPIDER	1			
22	12D-3/816X1	SCREW FLAT SOCKET MACH	3			
23	VRC28472	PLATE, ADJUSTING, BELT TENSIONER	1			
24	VRC28476	WASHER FLAT 3/8	1			
25	VRC28475	WASHER FLAT 1-7/8 X 13/32 X 0.041	1			
26	VRC28473	SPACER, IDLER, ECCENTRIC, BELT	1			
27	VRC28470	BEARING, IDLER AND TENSIONER, BELT	2		1	2
28	VRS28400	BELT, DRIVE, CYLINDER LUBE PUMP	1	1	1	1
29	VRC28477	SCREW 12-POINT 3/8 - 16 X 2	1			
30	VRC25017	SCREW 12-POINT 1/2 - 13 X 1-3/4	1			
31	VRS28425	SHEAVE BELT, CYLINDER LUBE PUMP	1			
32	VRC28429	SETSCREW 3/8 - 16 X 3/4 CUP PNT	1			
33	VRC21106	KEY, CRANKSHAFT, ACCESSORY-END	2			
34	9A-1/428X3/4	CAPSCREW SOCKET HEAD	3			
35	VRS28481	COVER, ACCESSORY DRIVE BELT GUARD	1			
36	VRS28480	GUARD, BELT CYLINDER LUBE PUMP	1			
37	VRS28067	SCREW, 12-POINT 3/8 - 16 X 3	1			
38	VRC28474	SLEEVE, IDLER, ECCENTRIC	1			
39	VRC28471	SLEEVE, TENSIONER, BELT	1			
40	VRC28239	SETSCREW 5/16 - 18 X 1/2 CUP PNT	1			
41	VRC28465	SHEAVE, BELT, CYLINDER LUBE PUMP	1			
42	VRC28565A	FLANGE AND INTEGRAL, BEARING SHAFT ASSEMBLY	1			1
43	VRC28583	SNAP RING H0-150, 1.660 OD	1			
44	VRC28581	BEARING, INTEGRAL, LUBE OIL PUMP	1			
45	VRC28560	FLANGE, MOUNTING, CYLINDER LUBE PUMP	1			
46	VRS28552	SUPPORT, PLATE MOUNTING LEFT	1			
* Refer to section 7.1, Divider Blocks, for required pump size.						
** Refer to section 7.1, Divider Blocks, for required block part number.						

3.8 Frame Kits

3.8.1 Frame Gasket Kit

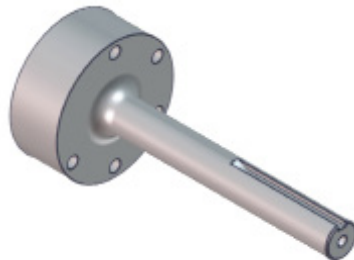
FRAME GASKET KIT		
PART NO.	DESCRIPTION	QTY.
VRS21025K	GASKET KIT, FRAME, VRS-2 COMPRESSOR	1
Kit contains: 1 – Gasket, Cover Plate, Frame Top 4 – Gasket, Cover Plate, Frame Side		

3.9 Lubrication System Assemblies

LUBRICATION SYSTEM ASSEMBLIES		
PART NO.	DESCRIPTION	QTY.
BELT DRIVE SYSTEM ASSEMBLIES		
VRC28500A	PUMP, OIL, CYLINDER LUBE, 3/16" WITH RESERVOIR	1
VRC28502A	PUMP, OIL, CYLINDER LUBE, 1/4" WITH RESERVOIR	1
VRC28504A	PUMP, OIL, CYLINDER LUBE, 3/8" WITH RESERVOIR	1
VRC28565A	FLANGE AND INTEGRAL BEARING SHAFT ASSEMBLY *	1
* Assembly includes: Flange, mounting, cylinder lube pump Shaft, integral bearing, lube oil pump Ring, retaining, pump shaft See section 7.1, Divider Blocks, for specific divider block and pump sizes required.		

3.10 Frame Accessories

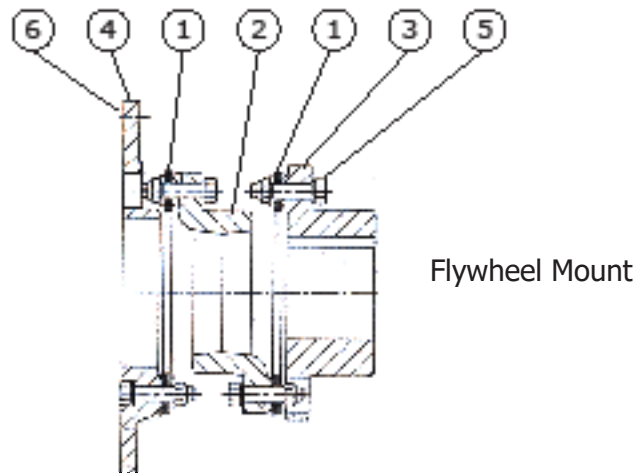
3.10.1 Stubshaft



This shaft is designed to belt-drive a maximum of 10 horsepower, or direct-drive a maximum of 15 horsepower.

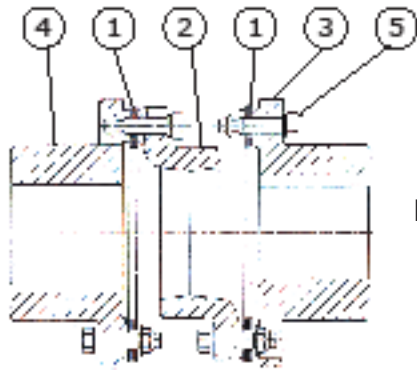
STUBSHAFT		
PART NO.	DESCRIPTION	QTY.
VRS21150	STUBSHAFT, ACCESSORY-END, 1 7/16"D × 13"L 3/8" KEYWAY	1
VRC23107	SCREWS, STUB SHAFT, 12-POINT (NOT SHOWN)	5

3.10.2 Coupling Parts – Flywheel Mount



FLYWHEEL MOUNT			
NO.	PART NO.	DESCRIPTION	QTY.
VRC29220 COUPLING, FLEX-DISC, FLYWHEEL MOUNT, REX CMR 312			1
1	VRC29221	DISC PACK, TOMALLOY TPACK, REX	2
2	VRC29222	SPACER (SPIDER), CENTER SECTION, REX	1
3	VRC29223	HUB, COMPRESSOR SHAFT, 2.88"L STANDARD, REX	1
4	VRC29224	PLATE, FLYWHEEL ADAPTER MOUNT, 14SAE, REX	1
5	VRC29229	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, REX (16 SETS)	1
6	VRC29208	BOLT, FLYWHEEL ADAPTER, COUPLING (NOT SHOWN)	8
VRC29200 COUPLING, FLEX-DISC, FLYWHEEL MOUNT, TB WOODS FSH 31			1
1	VRC29201	DISC PACK, ALLOY STEEL, TB WOODS	2
2	VRC29202	SPACER (SPIDER), CENTER SECTION, TB WOODS	1
3	VRC29203	HUB, COMPRESSOR SHAFT, 2.38"L CUSTOM, TB WOODS	1
4	VRC29204	PLATE, FLYWHEEL ADAPTER MOUNT, 14SAE, TB WOODS	1
5	VRC29209	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, TB WOODS (16 SETS)	1
6	VRC29208	BOLT, FLYWHEEL ADAPTER, COUPLING (NOT SHOWN)	8
VRS29270 COUPLING, FLEX-DISC, FLYWHEEL MOUNT, REX CMR 350			1
1	VRS29271	DISC PACK, TOMALLOY TPACK, REX	2
2	VRS29272	SPACER (SPIDER), CENTER SECTION, REX	1
3	VRS29273	HUB, COMPRESSOR SHAFT, 2.88"L STANDARD, REX	1
4	VRS29274	PLATE, FLYWHEEL ADAPTER MOUNT, 14SAE, REX	1
5	VRS29279	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, REX (16 SETS)	1
6	VRS29208	BOLT, FLYWHEEL ADAPTER, COUPLING (NOT SHOWN)	8

3.10.3 Coupling Parts – Electric Motor Mount



Electric Motor Mount

ELECTRIC MOTOR MOUNT			
ITEM NO.	PART NO.	DESCRIPTION	QTY.
VRS29280 REXNORD COUPLING FOR MOTOR DRIVE, FLEX-DISC, REX AMR 350			1
1	VRS29281	DISC PACK, TOMALLOY TPACK, REX	2
2	VRS29282	SPACER (SPIDER), CENTER SECTION, REX	1
3	VRS29283	HUB, COMPRESSOR SHAFT, 2.88"L STANDARD, REX	1
4	VRS29285	HUB, MOTOR MOUNT, BLANK BORE (ID TO BE MACHINED BY OTHERS)	1
5	VRS29289	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, REX (16 SETS)	1

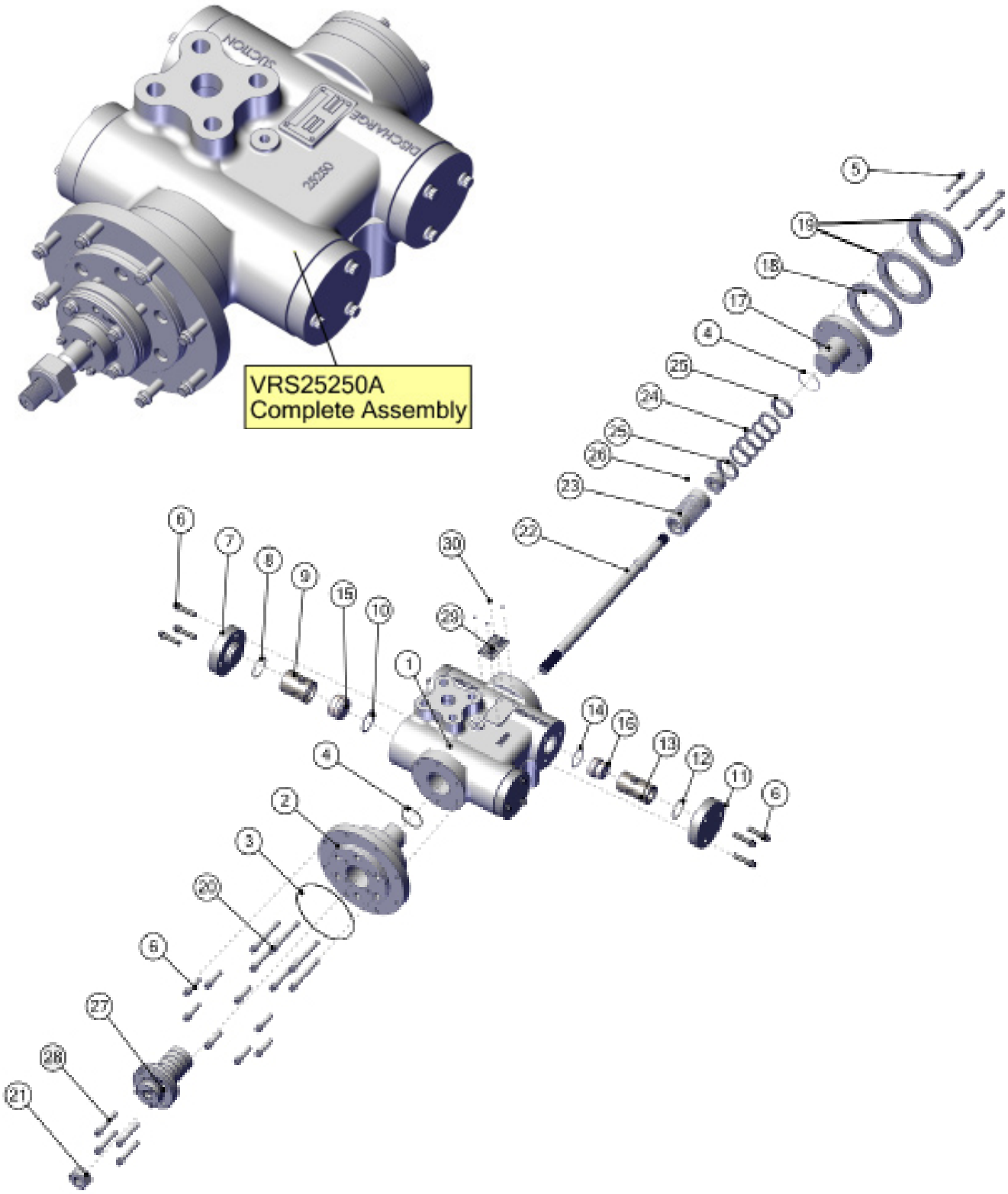
3.10.4 Coupling Guard

COUPLING GUARD			
PART NO.	DESCRIPTION	QTY.	
VRS29250	GUARD, COUPLING, ENGINE MOUNT HALF-SHELL*	2*	
VRC29317	SCREW, GUARD, HEX HEAD	6	
* Two are required to completely enclose the coupling.			

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4 Double-acting Cylinder and Piston

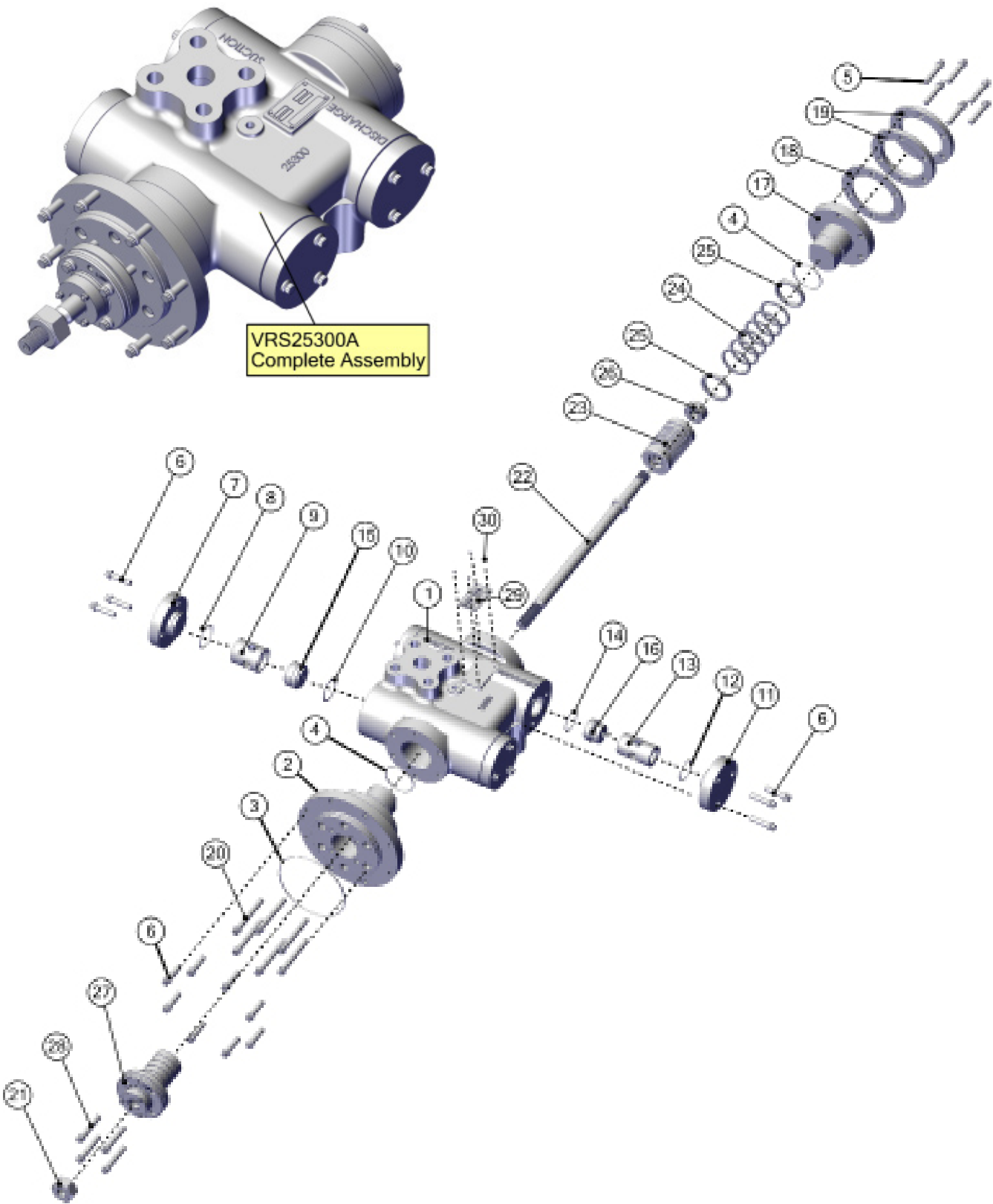
4.1 2.5-inch Double-acting Cylinder and Piston Parts



2.5-INCH DOUBLE-ACTING CYLINDER AND PISTON

NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VR-S25250A	CYLINDER, 2.5" DA, ASSEMBLY				
1	VRS25250	CYLINDER, 2.5" DA	1			
2	VRS25251	HEAD, CRANK END, 2.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25252	O-RING, HEAD, CRANK AND OUTER END, 2.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT	6			
6	VRC25077	SCREW, VALVE COVER	20			
7	VRC25253	COVER, VALVE, SUCTION, 2.5"-3.0" CYLINDER	2			
8	VRC25254	O-RING, COVER, SUCTION VALVE, 2.25"-3.0" CYLINDER	2	2	2	2
9	VRS25256	RETAINER, VALVE, SUCTION, 2.5" DA CYLINDER	2			
10	VRC25255	GASKET, SUCTION VALVE SEAT, 2.25"-3.0" CYLINDER	2	2	2	2
11	VRC25303	COVER, VALVE, DISCHARGE, 2.25"-3.0" CYLINDER	2			
12	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25"-3.0" CYLINDER	2	2	2	2
13	VRS25258	RETAINER, VALVE, DISCHARGE, 2.5" DA CYLINDER	2			
14	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25-3.0" CYL	2	2	2	2
15	VR-S26315A	VALVE, SUCTION, 2.5"-3.0" CYLINDER, MEDIUM *	2	2		2
16	VR-S26325A	VALVE, DISCHARGE, 2.5"-3.0" CYLINDER, MEDIUM *	2	2		2
17	VRC27256	HEAD, OUTER-END, 2.5" CYLINDER	1			
18	VRC27253	SPACER, HEAD, OUTER-END 1/4" **	1			
19	VRC27254	SPACER, HEAD, OUTER-END 1/2" **	2			
20	VRC25087	SCREW, HEAD, CRANK-END, LONG	6			
21	VRC24909	NUT, JAM, PISTON ROD ***	1			1
22	VRC24130	ROD, PISTON, 2.5"-3.0" PISTONS	1			1
23	VRS24250	PISTON, 2.5" DA CYLINDER, CI	1			1
24	VRS24251	RING, 2.5" PISTON	5		5	5
25	VRC24252	BAND, RIDER, 2.5" PISTON	2		2	2
26	VRC24919	NUT, PISTON	1			1
27	VR-C23001A	CASE, PACKING, ASSEMBLY ****	1			1
28	VRC23107	SCREW, PACKING CASE	4			
29	VRS25110	NAMEPLATE, VRS CYLINDER	1			
30	VRC21606	PIN, NAMEPLATE	4			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** Spacer location inside or outside of head will be determined by site conditions.						
*** A heavier jam nut may be used if required for balancing. See section 4.19.						
**** Packing case ring kits are available. See section 4.16.						

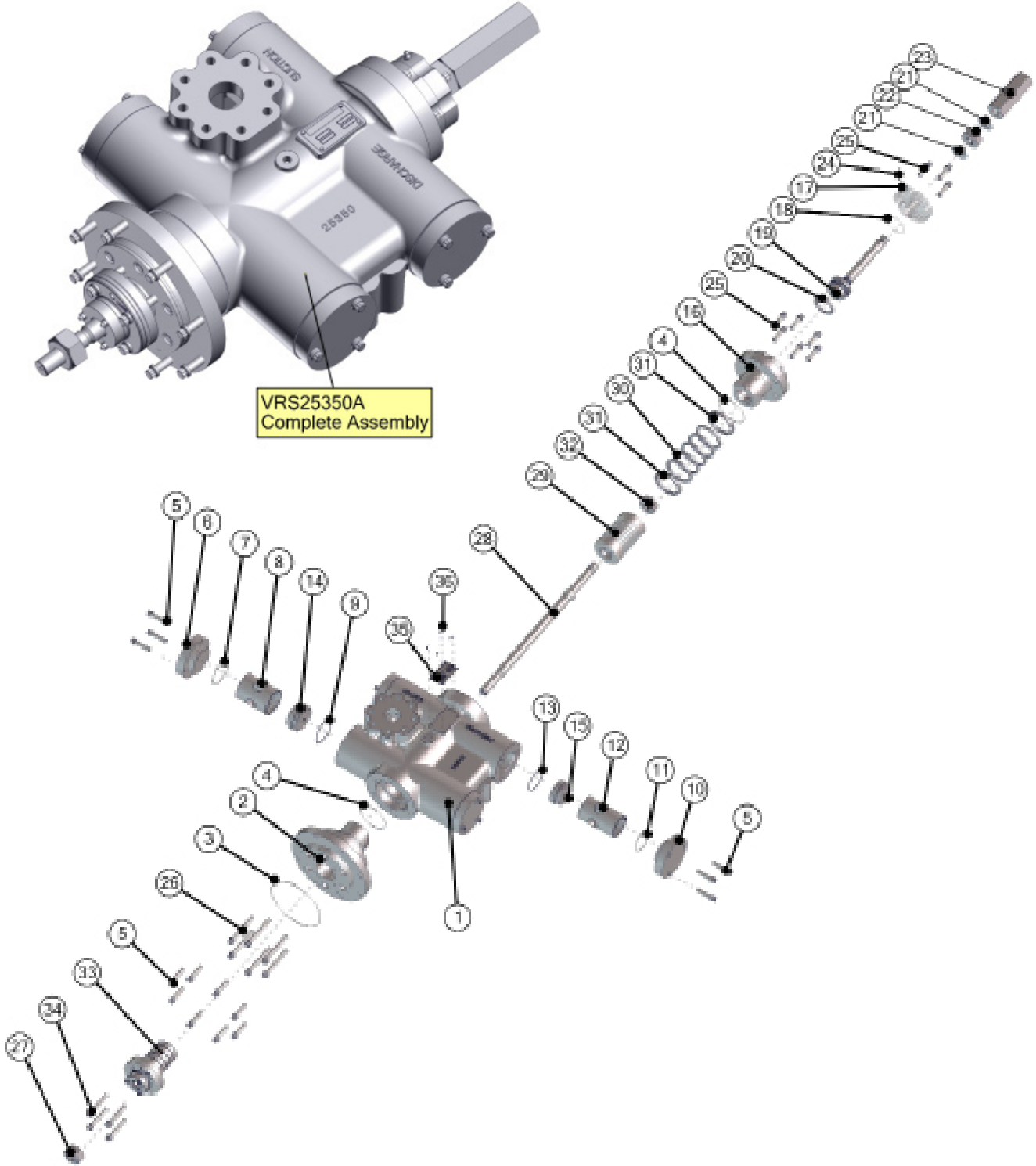
4.2 3.0-inch Double-acting Cylinder and Piston Parts



3.0-INCH DOUBLE-ACTING CYLINDER AND PISTON

NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25300A	CYLINDER, 3.0" DA, ASSEMBLY				
1	VRS25300	CYLINDER, 3.0" DA	1			
2	VRS25301	HEAD, CRANK END, 3.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25302	O-RING, HEAD, CRANK, OUTER END AND SAHE 3.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT	6			
6	VRC25077	SCREW, VALVE COVER	20			
7	VRC25253	COVER, VALVE, SUCTION, 2.25"-3.0" CYLINDER	2			
8	VRC25254	O-RING, COVER, SUCTION VALVE, 2.25"-3.0" CYLINDER	2	2	2	2
9	VRS25306	RETAINER, VALVE, SUCTION, 3.0" DA CYLINDER	2			
10	VRC25255	GASKET, SUCTION VALVE SEAT, 2.25"-3.0" CYLINDER	2	2	2	2
11	VRC25303	COVER, VALVE, DISCHARGE, 2.25"-3.0" CYLINDER	2			
12	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25"-3.0" CYLINDER	2	2	2	2
13	VRS25308	RETAINER, VALVE, DISCHARGE, 3.0" DA CYLINDER	2			
14	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25"-3.0" CYLINDER	2	2	2	2
15	VRS26315A	VALVE, SUCTION, 2.5"-3.0" CYLINDER, MEDIUM *	2	2		2
16	VRS26325A	VALVE, DISCHARGE, 2.5"-3.0" CYLINDER, MEDIUM *	2	2		2
17	VRC27306	HEAD, OUTER-END, 3.0" CYLINDER	1			
18	VRC27253	SPACER, HEAD, OUTER-END 1/4" **	1			
19	VRC27254	SPACER, HEAD, OUTER-END 1/2" **	2			
20	VRC25087	SCREW, HEAD, CRANK-END, LONG	6			
21	VRC24909	NUT, JAM, PISTON ROD ***	1			1
22	VRC24130	ROD, PISTON, 2.5"-3.0" PISTONS	1			1
23	VRS24300	PISTON, 3.0" DA CYLINDER, CI	1			1
24	VRS24301	RING, 3.0" PISTON	6		6	6
25	VRS24302	BAND, RIDER, 3.0" PISTON	2		2	2
26	VRC24919	NUT, PISTON	1			1
27	VRC23001A	FLANGE, PACKING CASE ****	1			1
28	VRC23107	SCREW, PACKING CASE	4			
29	VRS25110	NAMEPLATE, VRS CYLINDER	1			
30	VRC21606	PIN, NAMEPLATE	4			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** Spacer location inside or outside of head will be determined by site conditions.						
*** A heavier jam nut may be used if required for balancing. See section 4.19.						
**** Packing case ring kits are available. See section 4.16.						

4.3 3.5-inch Double-acting Cylinder and Piston Parts



3.5-INCH DOUBLE-ACTING CYLINDER AND PISTON

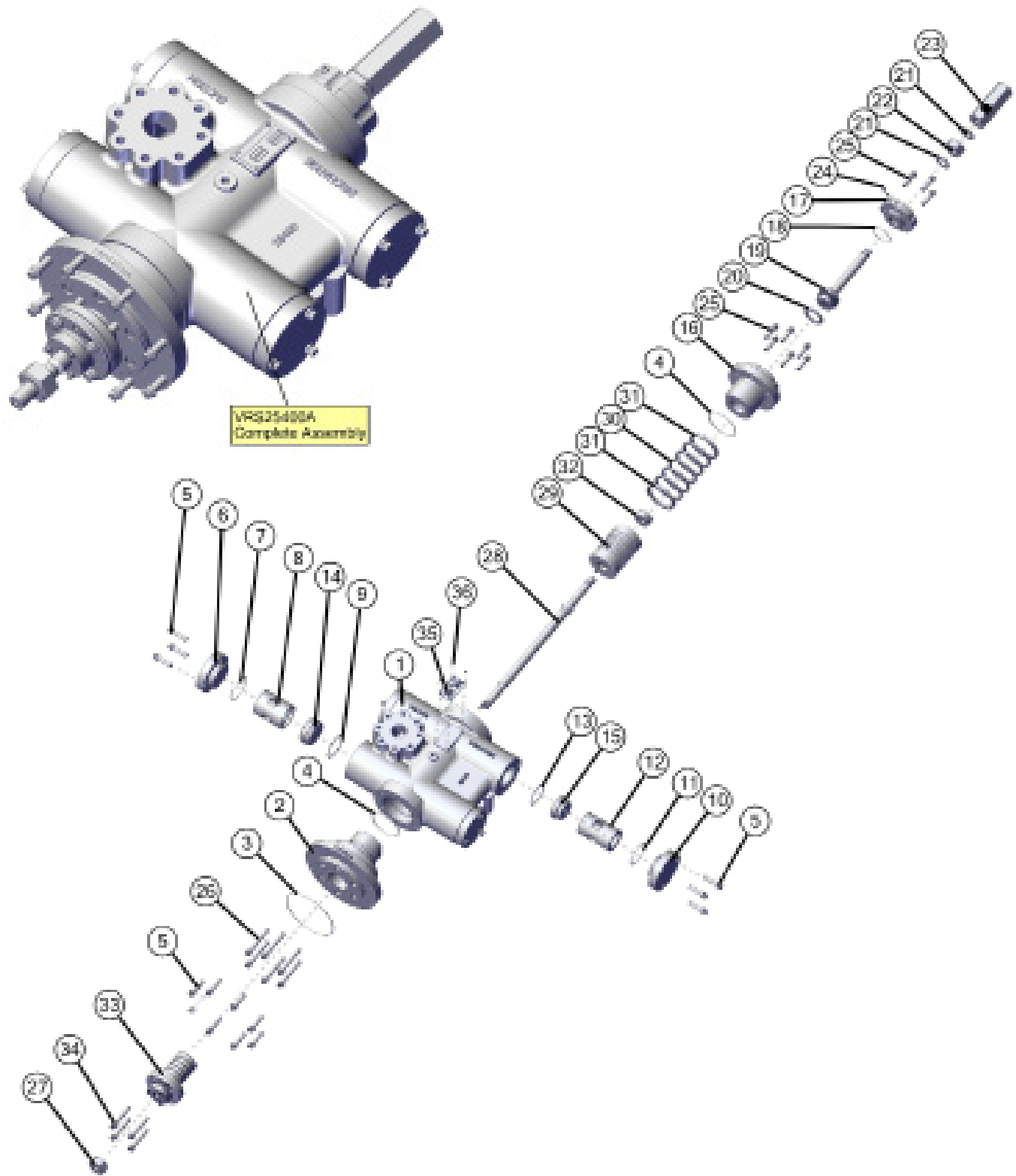
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25350A	CYLINDER, 3.5" DA, ASSEMBLY				
1	VRS25350	CYLINDER, 3.5" DA	1			
2	VRS25351	HEAD, CRANK END, 3.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25352	O-RING, HEAD, CRANK AND OUTER END, 3.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2			
7	VRC25354	O-RING, COVER, SUCTION VALVE 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
8	VRS25356	RETAINER, VALVE, SUCTION, 3.5" DA CYLINDER	2			
9	VRC25355	GASKET, SUCT, VALVE SEAT, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2	2	2	2
10	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYL. AND 3.0"-3.5" SAHE	2			
11	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
12	VRS25358	RETAINER, VALVE, DISCHARGE, 3.5" DA CYLINDER	2			
13	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
14	VRS26415A	VALVE, SUCTION, 3.5"-4.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26425A	VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27351	POCKET, OUTER HEAD, 3.5" VVCP	1			
17	VRC27353	COVER, POCKET, 3.5"-4.0" VVCP	1			
18	VRC27354	O-RING,POCKET COVER, 3.5"-4.0" VVCP	1			1
19	VRC27357A	PISTON AND STEM ASSEMBLY, 3.5"-4.0" VVCP	1			1
20	VRC27358	RING, PISTON, 3.5"-4.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25047	SCREW, HEAD, CRANK-END, LONG	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24140	ROD, PISTON, 3.5-4.0" PISTON	1			1
29	VRS24350	PISTON, 3.5" DA CYLINDER, CI	1			1
30	VRC24351	RING, 3.5" PISTON	5		5	5
31	VRS24352	BAND, RIDER, 3.5" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	2			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.4 4.0-inch Double-acting Cylinder and Piston Parts



4.0-INCH DOUBLE-ACTING CYLINDER AND PISTON

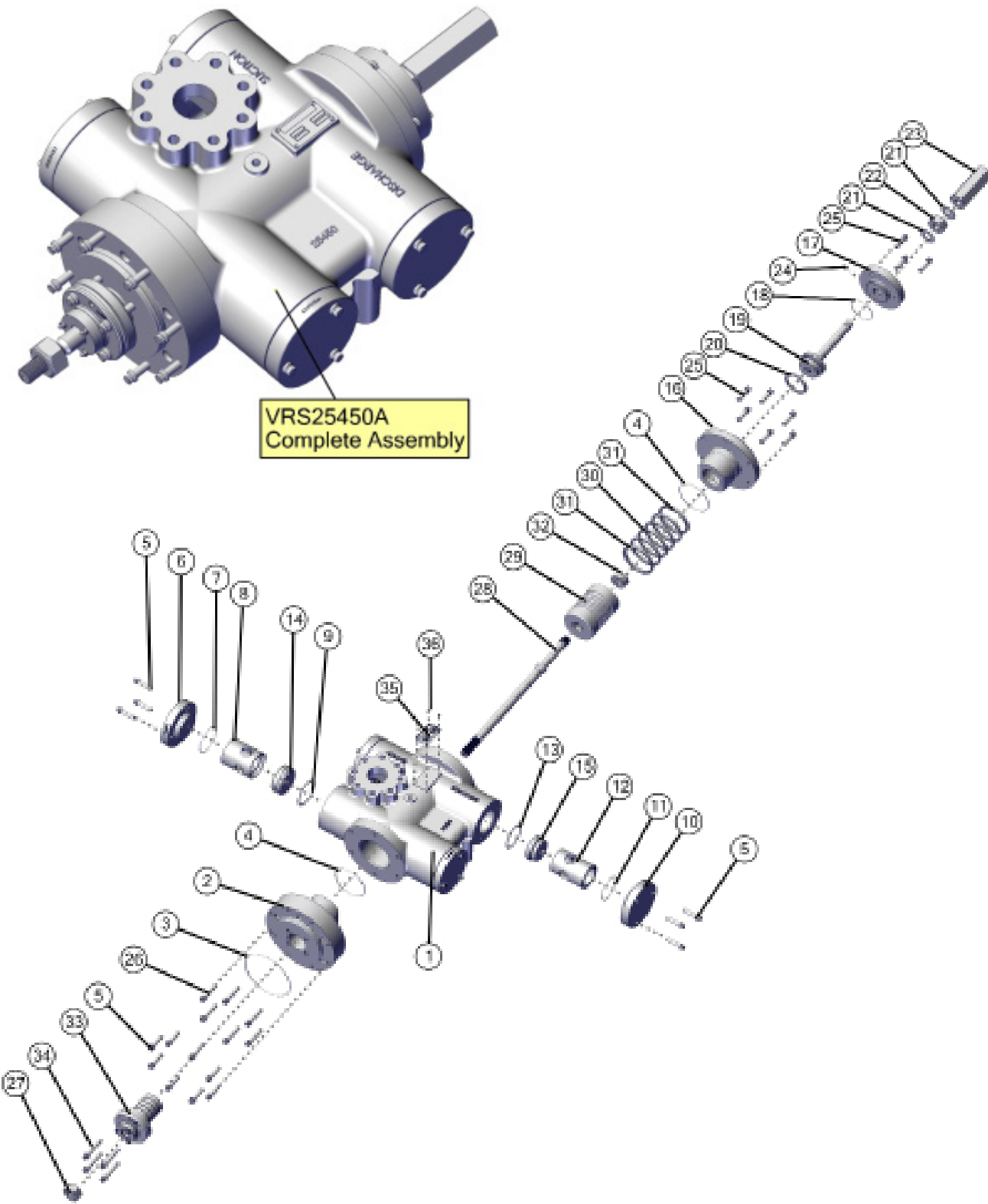
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25400A	CYLINDER, 4.0" DA, ASSEMBLY				
1	VRS25400	CYLINDER, 4.0" DA	1			
2	VRS25401	HEAD, CRANK-END, 4.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25402	O-RING, HEAD, CRANK AND OUTER END, 4.0" DA CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2			
7	VRC25354	O-RING, COVER, SUCTION VALVE 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
8	VRS25406	RETAINER, VALVE, SUCTION, 4.0" DA CYLINDER	2			
9	VRC25355	GASKET, SUCT, VALVE SEAT, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2	2	2	2
10	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2			
11	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
12	VRS25408	RETAINER, VALVE, DISCHARGE, 4.0" CYLINDER	2			
13	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
14	VRS26415A	VALVE, SUCTION, 3.5"-4.0" CYLINDER MEDIUM *	2	2		2
15	VRS26425A	VALVE, DISCHARGE, 3.5"-4.0" CYLINDER MEDIUM *	2	2		2
16	VRC27401	POCKET, OUTER HEAD, 4.0" VVCP	1			
17	VRC27353	COVER, POCKET, 3.5"-4.0" VVCP	1			
18	VRC27354	O-RING, POCKET COVER, 3.5"-4.0" VVCP	1			1
19	VRC27357A	PISTON AND STEM ASSEMBLY, 3.5"-4.0" VVCP	1			1
20	VRC27358	RING, PISTON, 3.5"-4.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25037	SCREW, CYLINDER TO FRAME, LONG	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24140	ROD, PISTON, 3.5-4.0" PISTON	1			1
29	VRS24400	PISTON, 4.0" DA CYLINDER, CI, VRC24400	1			1
30	VRC24401	RING, 4.0" PISTON	5		5	5
31	VRS24402	BAND, RIDER, 4.0" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.5 4.5-inch Double-acting Cylinder and Piston Parts



4.5-INCH DOUBLE-ACTING CYLINDER AND PISTON

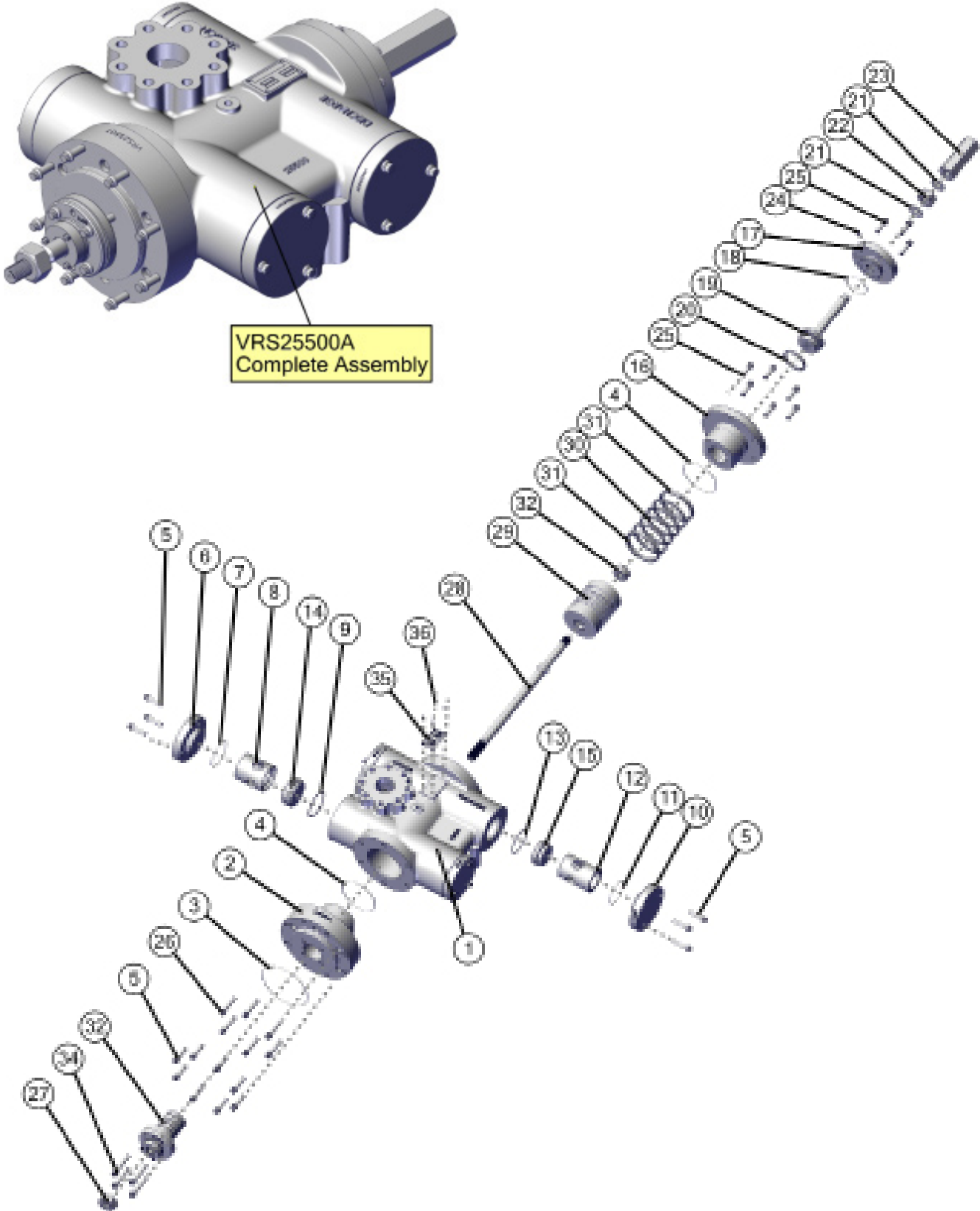
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25450A	CYLINDER, 4.5" DA, ASSEMBLY				
1	VRS25450	CYLINDER, 4.5" DA	1			
2	VRS25451	HEAD, CRANK-END, 4.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25452	O-RING, HEAD, CRANK AND OUTER END 4.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER	2			
7	VRC25454	O-RING, COVER, SUCT, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25456	RETAINER, VALVE, SUCTION, 4.5" DA CYLINDER	2			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
10	VRS25503	COVER, VALVE, DISCHARGE, 4.5"-5.0" CYLINDER	2			
11	VRC25504	O-RING, COVER, DISCH, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25458	RETAINER, VALVE, DISCHARGE, 4.5" DA CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27451	POCKET, OUTER HEAD 4.5" VVCP	1			
17	VRC27453	COVER, POCKET, 4.5"-5.0" VVCP	1			
18	VRC27454	O-RING, POCKET COVER, 4.5"-5.0" VVCP	1			1
19	VRC27457A	PISTON AND STEM ASSEMBLY, 4.5"-5.0" VVCP	1			1
20	VRC27458	RING, PISTON, 4.5"- 5.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25027	SCREW, CYLINDER TO FRAME, SHORT	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24150	ROD, PISTON, 4.5"-5.0" PISTONS	1			1
29A	VRS24450	PISTON, 4.5" DA CYLINDER, CI	1			1
29B	VRS24455	PISTON, 4.5" DA CYL., AL (MAY BE USED IF REQ. FOR BALANCING)	1			1
30	VRC24451	RING, 4.5" PISTON	4		4	4
31	VRS24452	BAND, RIDER, 4.5" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.6 5.0-inch Double-acting Cylinder and Piston Parts



5.0-INCH DOUBLE-ACTING CYLINDER AND PISTON

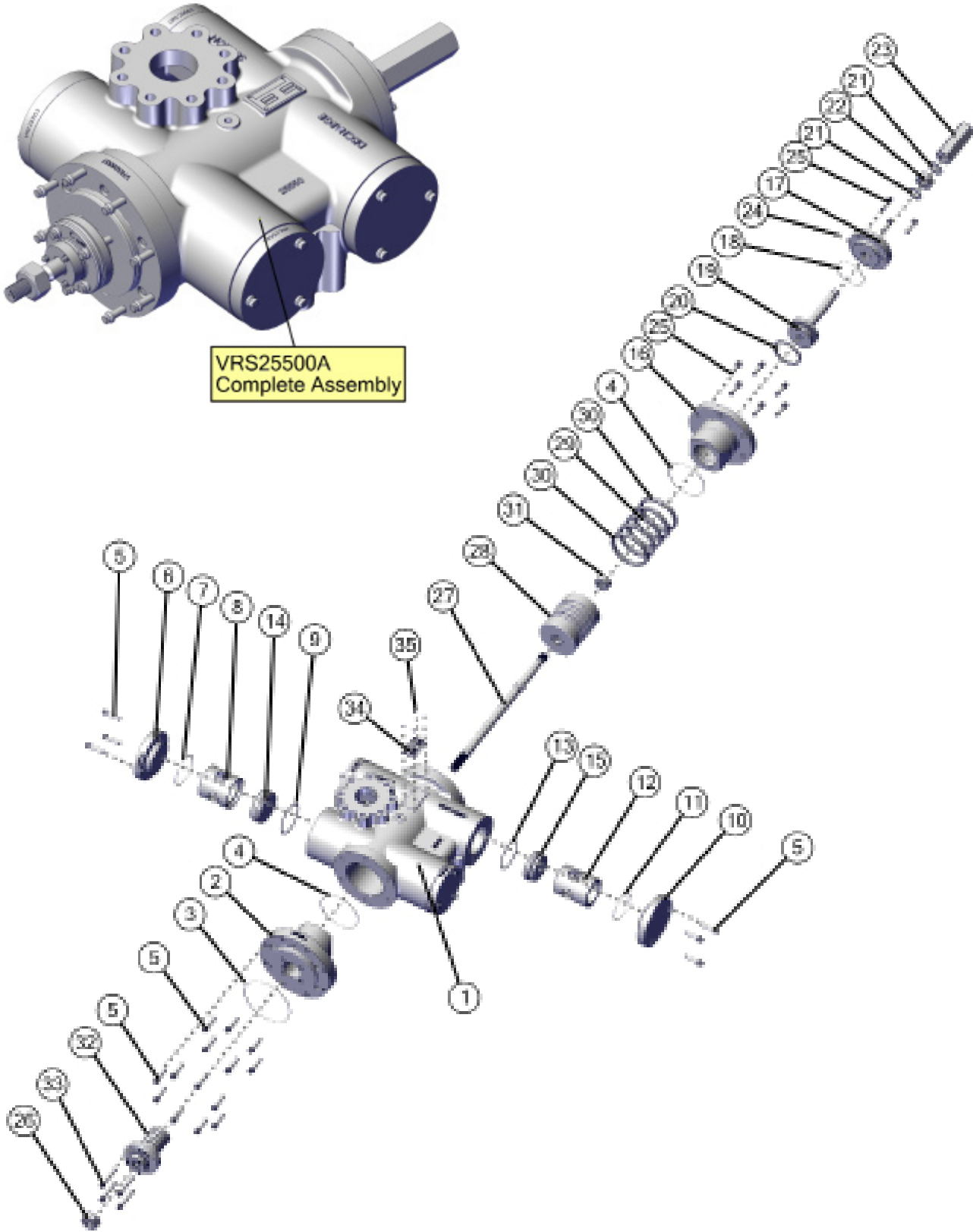
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25500A	CYLINDER, 5.0" DA, ASSEMBLY				
1	VRS25500	CYLINDER, 5.0" DA	1			
2	VRS25501	HEAD, CRANK-END, 5.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC27654	O-RING, HEAD, CRANK AND OUTER END, 5.0" CYL	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYL	2			
7	VRC25454	O-RING, COVER, SUCT, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25506	RETAINER, VALVE, SUCTION, 5.0" DA CYLINDER	2			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
10	VRS25503	COVER, VALVE, DISCHARGE, 4.5"-5.0" CYLINDER	2			
11	VRC25504	O-RING, COVER, DISCH, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25508	RETAINER, VALVE, DISCHARGE, 5.0" DA CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER MEDIUM *	2	2		2
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER MEDIUM *	2	2		2
16	VRC27501	POCKET, OUTER HEAD, 5.0" VVCP	1			
17	VRC27453	COVER, POCKET, 4.5"-5.0" VVCP	1			
18	VRC27454	O-RING, POCKET COVER, 4.5"-5.0" VVCP	1			1
19	VRC27457A	PISTON AND STEM ASSEMBLY, 4.5"-5.0" VVCP	1			1
20	VRC27458	RING, PISTON, 4.5"-5.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25027	SCREW, CYLINDER TO FRAME, SHORT	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24150	ROD, PISTON, 4.5"-5.0" PISTONS	1			1
29A	VRS24500	PISTON, 5.0" DA CYLINDER, CI	1			1
29B	VRS24505	PISTON, 5.0" DA CYL., AL (MAY BE USED IF REQ. FOR BALANCING)	1			1
30	VRC24501	RING, 5.0" PISTON	4		4	4
31	VRS24502	BAND, RIDER, 5.0" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.7 5.5-inch Double-acting Cylinder and Piston Parts



5.5-INCH DOUBLE-ACTING CYLINDER AND PISTON

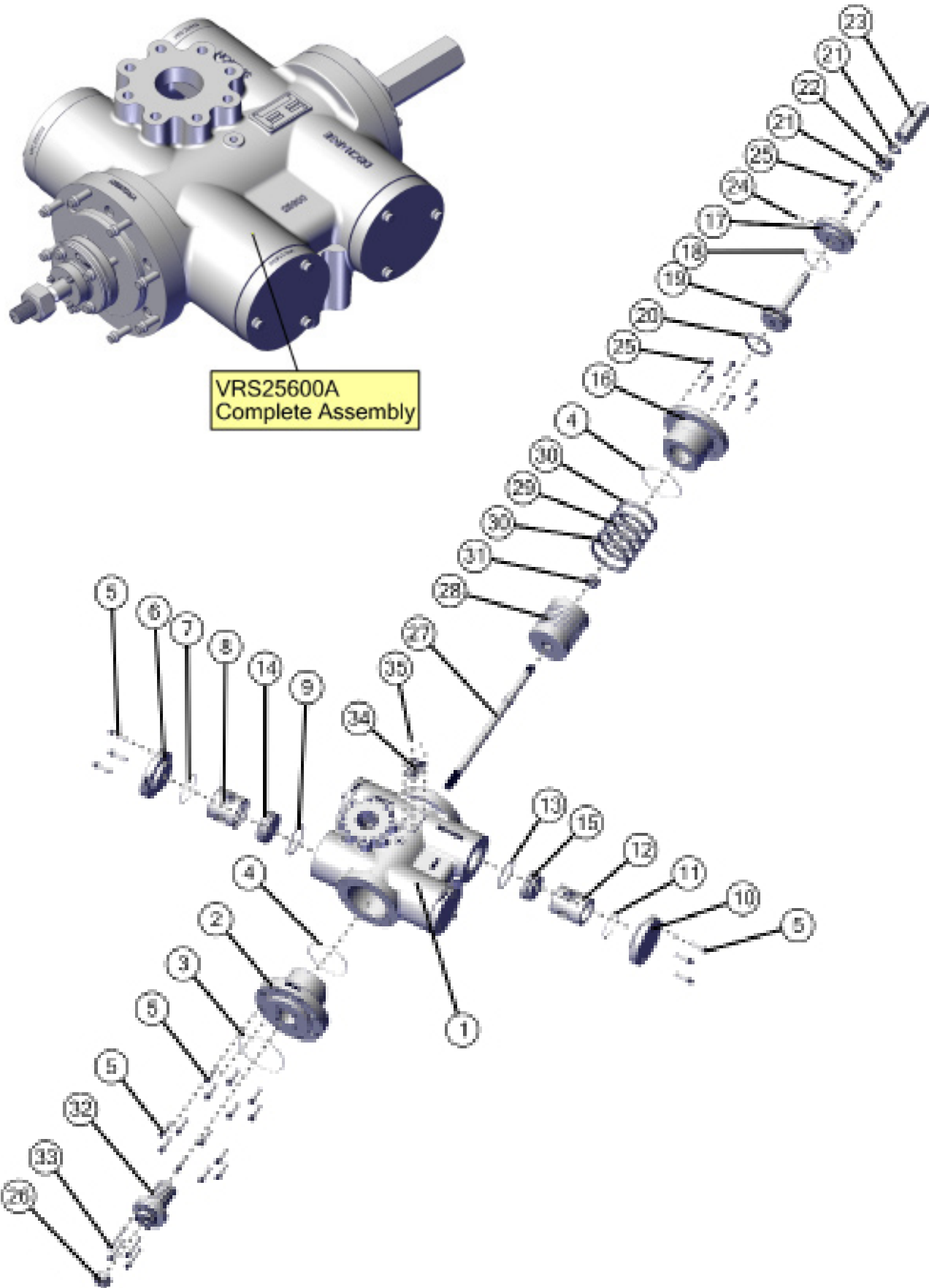
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25550A	CYLINDER, 5.5" DA, ASSEMBLY				
1	VRS25550	CYLINDER, 5.5" DA	1			
2	VRS25551	HEAD, CRANK END, 5.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25552	O-RING, HEAD, CRANK AND OUTER END, 5.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	26			
6	VRC25553	COVER, VALVE, SUCTION, 5.5"-6.0" CYLINDER	2			
7	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
8	VRS25556	RETAINER, VALVE, SUCTION, 5.5" DA CYLINDER	2			
9	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5"-6.0" CYLINDER	2	2	2	2
10	VRC25603	COVER, VALVE, DISCHARGE, 5.5"-6.0" CYLINDER	2			
11	VRC25604	O-RING, COVER, DISCH., VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
12	VRS25558	RETAINER, VALVE, DISCHARGE, 5.5" DA CYLINDER	2			
13	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5"-6.0" CYLINDER	2	2	2	2
14	VRS26615A	VALVE, SUCTION, 5.5"-6.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26625A	VALVE, DISCHARGE, 5.5"-6.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27551	POCKET, OUTER HEAD, 5.5" WVCP	1			
17	VRC27553	COVER, POCKET, 5.5"-6.0" WVCP	1			
18	VRC27554	O-RING, POCKET COVER, 5.5"-6.0" WVCP	1			1
19	VRC27557A	PISTON AND STEM ASSEMBLY, 5.5"-6.0" WVCP	1			1
20	VRC27558	RING, PISTON, 5.5"-6.0" WVCP	1			1
21	VRC27105	GASKET, WVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, WVCP ADJUSTING STEM	1			
23	VRC27101	COVER, WVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, WVCP	1			
25	VRC25017	SCREW, VALVE COVER AND WVCP	9			
26	VRC24909	NUT, JAM, PISTON ROD **	1			1
27	VRC24160	ROD, PISTON, 5.5"-6.0" PISTONS	1			1
28	VRS24550	PISTON, 5.5" DA CYLINDER, AL	1			1
29	VRC24551	RING, 5.5" PISTON	3		3	3
30	VRS24552	BAND, RIDER, 5.5" PISTON	2		2	2
31	VRC24919	NUT, PISTON	1			1
32	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
33	VRC23107	SCREW, PACKING CASE	4			
34	VRS25110	NAMEPLATE, VRS CYLINDER	1			
35	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.8 6.0-inch Double-acting Cylinder and Piston Parts



6.0-INCH DOUBLE-ACTING CYLINDER AND PISTON

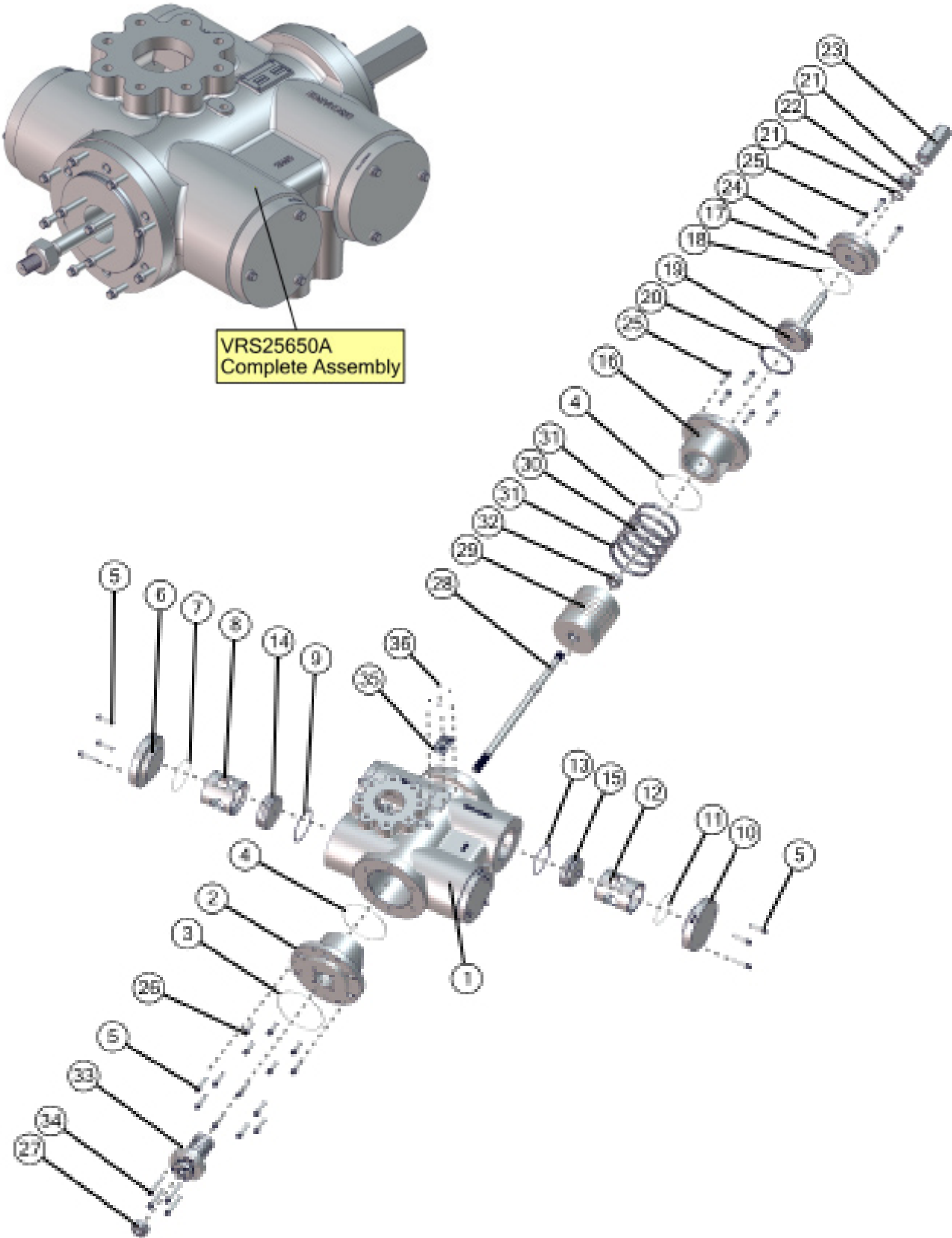
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25600A	CYLINDER, 6.0" DA, ASSEMBLY				
1	VRS25600	CYLINDER, 6.0" DA	1			
2	VRS25601	HEAD, CRANK-END, 6.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25602	O-RING, HEAD, CRANK AND OUTER END, 6.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	26			
6	VRC25553	COVER, VALVE, SUCTION, 5.5"-6.0" CYLINDER	2			
7	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
8	VRS25606	RETAINER, VALVE, SUCTION, 6.0" DA CYLINDER	2			
9	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5"-6.0" CYLINDER	2	2	2	2
10	VRC25603	COVER, VALVE, DISCHARGE, 5.5"-6.0" CYLINDER	2			
11	VRC25604	O-RING, COVER, DISCH., VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
12	VRS25608	RETAINER, VALVE, DISCHARGE, 6.0" DA CYLINDER	2			
13	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5"-6.0" CYLINDER	2	2	2	2
14	VRS26615A	VALVE, SUCTION, 5.5"-6.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26625A	VALVE, DISCHARGE, 5.5"-6.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27601	POCKET, OUTER HEAD, 6.0" VVCP	1			
17	VRC27553	COVER, POCKET, 5.5"-6.0" VVCP	1			
18	VRC27554	O-RING, POCKET COVER, 5.5"-6.0" VVCP	1			1
19	VRC27557A	PISTON AND STEM ASSEMBLY, 5.5"-6.0" VVCP	1			1
20	VRC27558	RING, PISTON, 5.5"-6.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC24909	NUT, JAM, PISTON ROD **	1			1
27	VRC24160	ROD, PISTON, 5.5"-6.0" PISTONS	1			1
28	VRS24600	PISTON, 6.0" DA CYLINDER, AL	1			1
29	VRC24601	RING, 6.0" PISTON	3		3	3
30	VRS24602	BAND, RIDER, 6.0" PISTON	2		2	2
31	VRC24919	NUT, PISTON	1			1
32	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
33	VRC23107	SCREW, PACKING CASE	4			
34	VRS25110	NAMEPLATE, VRS CYLINDER	1			
35	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.9 6.5-inch Double-acting Cylinder and Piston Parts



6.5-INCH DOUBLE-ACTING CYLINDER AND PISTON

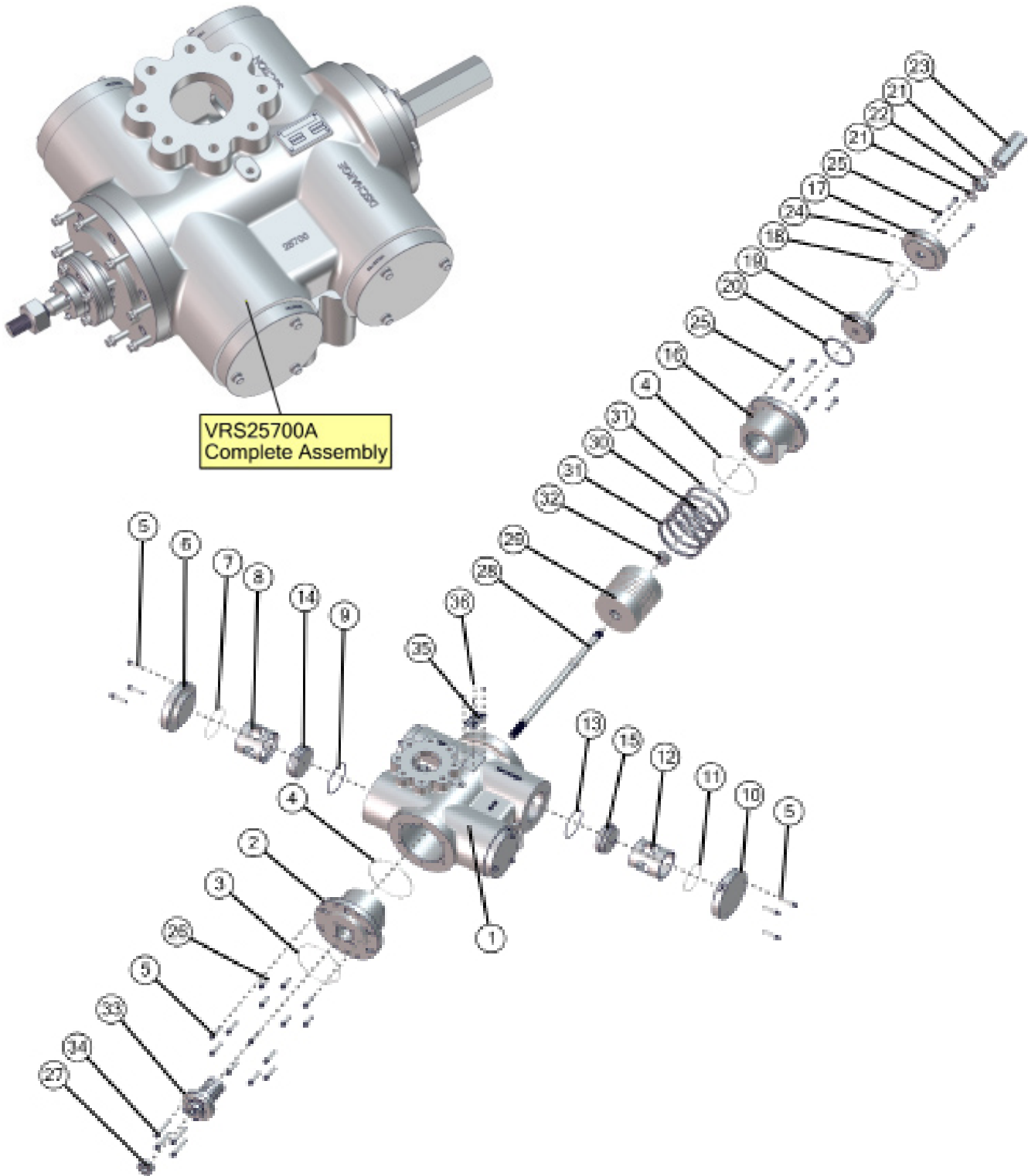
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25650A	CYLINDER, 6.5" DA, ASSEMBLY				
1	VRS25650	CYLINDER, 6.5" DA	1			
2	VRS25651	HEAD, CRANK END, 6.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25652	O-RING, HEAD, CRANK AND OUTER END, 6.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5" AND 10.0" CYLINDER	2			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
8	VRS25656	RETAINER, VALVE, SUCTION, 6.5" DA CYLINDER	2			
9	VRS25655	GASKET, SUCTION VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	2	2	2	2
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
11	VRS25704	O-RING, COVER, DISCHARGE VALVE, 6.5", 7.0", 9.5", 10.0" CYL	2	2	2	2
12	VRS25658	RETAINER, VALVE, DISCHARGE, 6.5" DA CYLINDER	2			
13	VRS25705	GASKET, DISCHARGE VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27651	POCKET, OUTER HEAD, 6.5" VVCP	1			
17	VRC27653	COVER, POCKET, 6.5"-7.0" VVCP	1			
18	VRC27654	O-RING, POCKET AND COVER, 6.5"-7.0" VVCP	1			1
19	VRC27657A	PISTON AND STEM ASSEMBLY, 6.5"-7.0" VVCP	1			1
20	VRC27658	RING, PISTON, 6.5"-7.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25007	SCREW, HEAD, CRANK-END	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24180	ROD, PISTON, 6.5 - 8.0" PISTONS	1			1
29	VRS24650	PISTON, 6.5" DA CYLINDER, AL	1			1
30	VRC24651	RING, 6.5" PISTON	3		3	3
31	VRS24652	BAND, RIDER, 6.5" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.10 7.0-inch Double-acting Cylinder and Piston Parts



7.0-INCH DOUBLE-ACTING CYLINDER AND PISTON

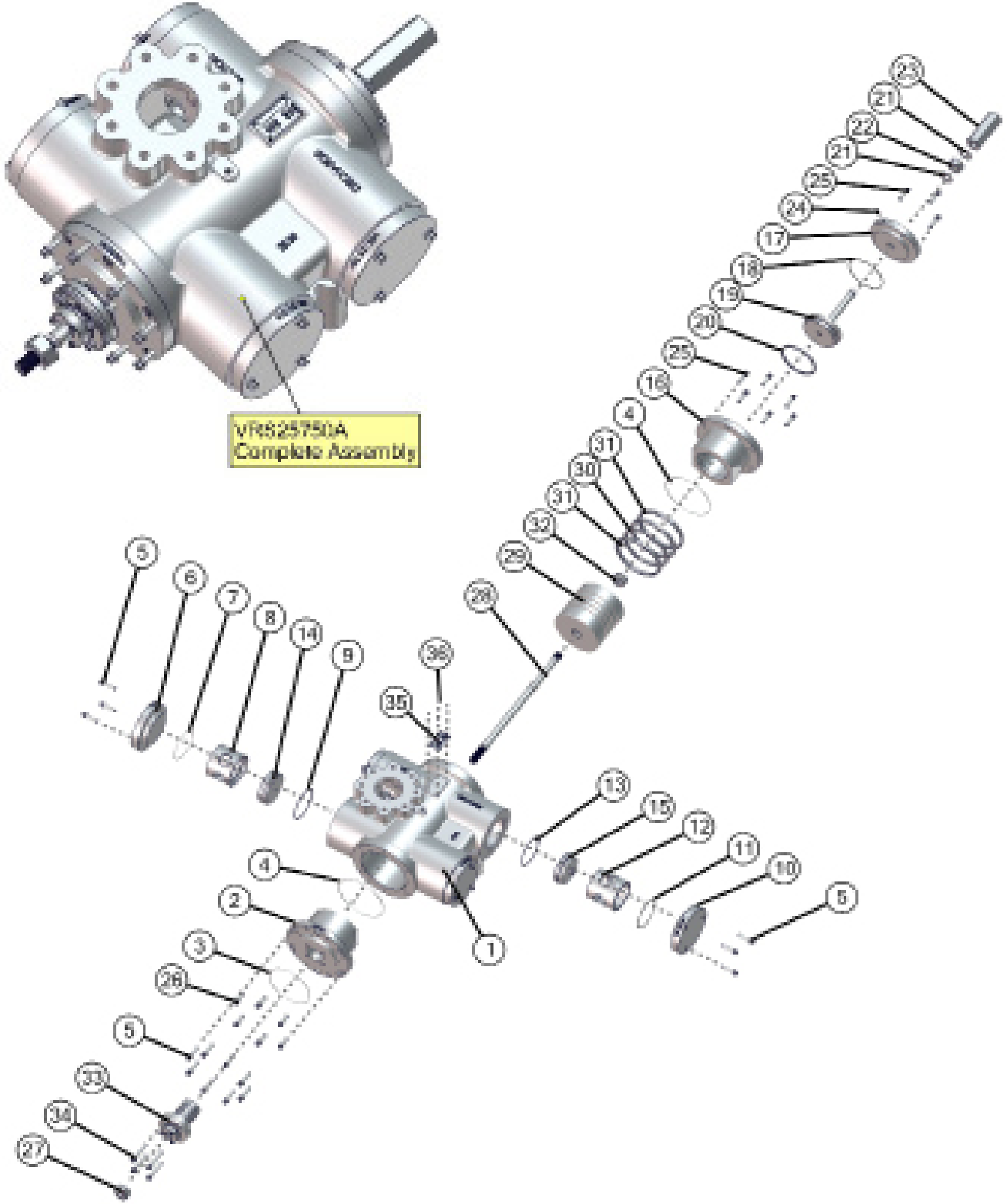
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25700A	CYLINDER, 7.0" DA, ASSEMBLY				
1	VRS25700	CYLINDER, 7.0" DA	1			
2	VRS25701	HEAD, CRANK END, 7.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25702	O-RING, HEAD, CRANK AND OUTER-END, 7.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5" AND 10.0" CYLINDER	2			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
8	VRS25706	RETAINER, VALVE, SUCTION, 7.0" DA CYLINDER	2			
9	VRS25655	GASKET, SUCTION VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	2	2	2	2
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
11	VRS25704	O-RING, COVER, DISCHARGE VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
12	VRS25708	RETAINER, VALVE, DISCHARGE, 7.0" DA CYLINDER	2			
13	VRS25705	GASKET, DISCHARGE VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27701	POCKET, OUTER HEAD, 7.0" VVCP	1			
17	VRC27653	COVER, POCKET, 6.5"-7.0" VVCP	1			
18	VRC27654	O-RING, POCKET AND COVER, 6.5"-7.0" VVCP	1			1
19	VRC27657A	PISTON AND STEM ASSEMBLY, 6.5"-7.0" VVCP	1			1
20	VRC27658	RING, PISTON, 6.5"-7.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25007	SCREW, HEAD, CRANK-END	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24180	ROD, PISTON, 6.5 - 8.0" PISTONS	1			1
29	VRS24700	PISTON, 7.0" DA CYLINDER, AL	1			1
30	VRC24701	RING, 7.0" PISTON	3		3	3
31	VRS24702	BAND, RIDER, 7.0" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.11 7.5-inch Double-acting Cylinder and Piston Parts



7.5-INCH DOUBLE-ACTING CYLINDER AND PISTON

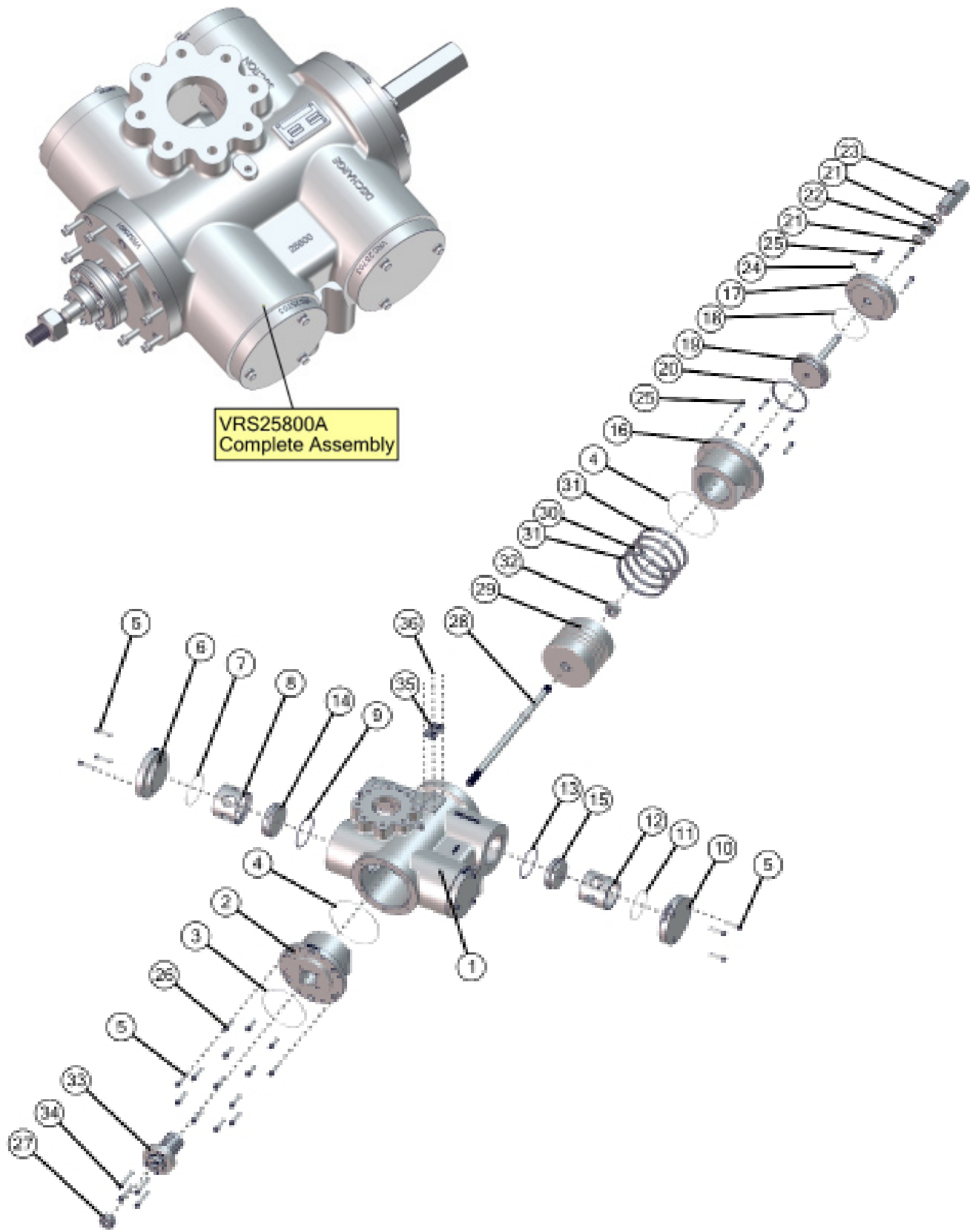
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25750A	CYLINDER, 7.5" DA, ASSEMBLY				
1	VRS25750	CYLINDER, 7.5" DA	1			
2	VRS25751	HEAD,CRANK END, 7.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25752	O-RING, HEAD, CRANK AND OUTER END, 7.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRC25653	COVER, VALVE, SUCTION, 6.5"-8.5" VRC AND 7.5"-8.0" VRS	2			
7	VRC27654	O-RING, COVER, SUCTION VALVE., 6.5"-8.5" VRC, 7.5"-8.0" VRS	2	2	2	2
8	VRS25756	RETAINER, VALVE, SUCTION, 7.5" DA CYLINDER	2			
9	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5"-8.5" VRC AND 7.5"-8.0" VRS	2	2	2	2
10	VRC25703	COVER, VALVE, DISCHARGE, 6.5"-8.5" VRC, 7.5"-8.0" VRS	2			
11	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5"-8.5" VRC, 7.5"-8.0" VRS	2	2	2	2
12	VRS25758	RETAINER, VALVE, DISCHARGE, 7.5" DA CYLINDER	2			
13	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5"-8.5" VRC, 7.5"-8.0" VRS	2	2	2	2
14	VRS26815A	VALVE, SUCTION, 7.5"-8.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26825A	VALVE, DISCHARGE, 7.5"-8.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27751	POCKET, OUTER HEAD, 7.5" VVCP	1			
17	VRC27753	COVER, POCKET, 7.5"-8.0" VVCP	1			
18	VRC27754	O-RING, POCKET COVER, 7.5"-8.0" VVCP	1			1
19	VRC27757A	PISTON AND STEM ASSEMBLY, 7.5"-8.0" VVCP	1			1
20	VRC27758	RING, PISTON, 7.5"-8.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25007	SCREW, HEAD, CRANK-END	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24180	ROD, PISTON, 6.5"-8.0" PISTONS	1			1
29	VRS24750	PISTON, 7.5" DA CYLINDER, AL	1			1
29A	VRS24750LA	PISTON, 7.5" DA CYLINDER, 2-PIECE ASSEMBLY, AL	1			1
30	VRC24751	RING, 7.5" PISTON	2		2	2
31	VRS24752	BAND,RIDER,7.5" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.12 8.0-inch Double-acting Cylinder and Piston Parts



8.0-INCH DOUBLE-ACTING CYLINDER AND PISTON

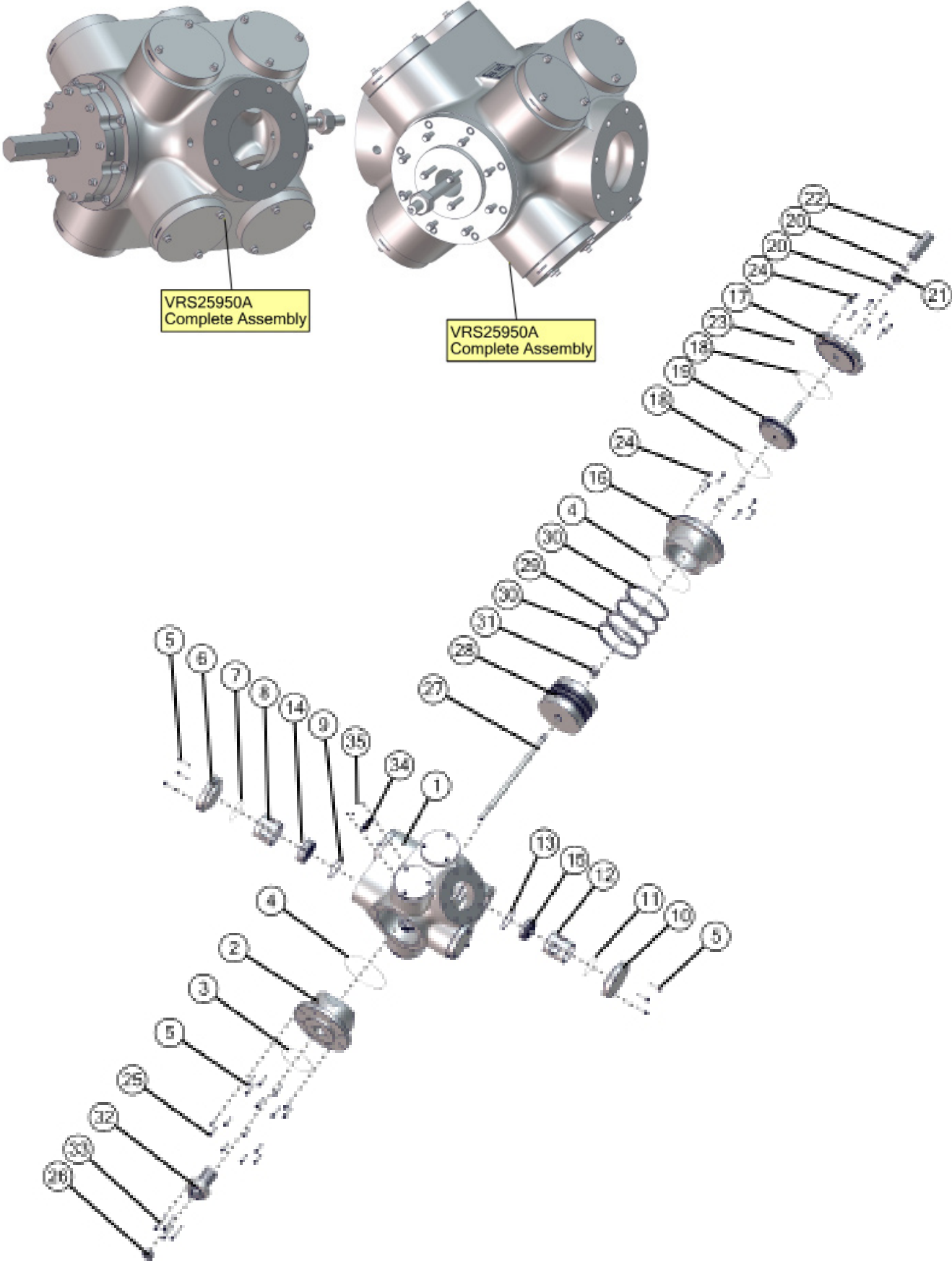
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25800A	CYLINDER, 8.0" DA, ASSEMBLY				
1	VRS25800	CYLINDER, 8.0" DA	1			
2	VRS25801	HEAD, CRANK END, 8.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25802	O-RING, HEAD, CRANK AND OUTER END, 8.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	20			
6	VRC25653	COVER, VALVE, SUCTION, 6.5"-8.5" VRC AND 7.5"-8.0" VRS	2			
7	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5"-8.5" VRC, 7.5"-8.0" VRS	2	2	2	2
8	VRS25806	RETAINER, VALVE, SUCTION, 8.0" DA CYLINDER	2			
9	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5"-8.5" VRC AND 7.5"-8.0" VRS	2	2	2	2
10	VRC25703	COVER, VALVE, DISCHARGE, 6.5"-8.5" VRC AND 7.5"-8.0" VRS	2			
11	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5"-8.5" VRC, 7.5"-8.0" VRS	2	2	2	2
12	VRS25808	RETAINER, VALVE, DISCHARGE, 8.0" DA CYLINDER	2			
13	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5"-8.5" VRC, 7.5"-8.0" VRS	2	2	2	2
14	VRS26815A	VALVE, SUCTION, 7.5"-8.0" CYLINDER, MEDIUM *	2	2		2
15	VRS26825A	VALVE, DISCHARGE, 7.5"-8.0" CYLINDER, MEDIUM *	2	2		2
16	VRC27801	POCKET, OUTER HEAD, 8.0" VVCP	1			
17	VRC27753	COVER, POCKET, 7.5"-8.0" VVCP	1			
18	VRC27754	O-RING, POCKET COVER, 7.5"-8.0" VVCP	1			1
19	VRC27757A	PISTON AND STEM ASSEMBLY, 7.5"-8.0" VVCP	1			1
20	VRC27758	RING, PISTON, 7.5"-8.0" VVCP	1			1
21	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
22	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
23	VRC27101	COVER, VVCP ADJUSTING STEM	1			
24	VRC27109	GREASE ZERK, VVCP	1			
25	VRC25017	SCREW, VALVE COVER AND VVCP	9			
26	VRC25007	SCREW, HEAD, CRANK-END	6			
27	VRC24909	NUT, JAM, PISTON ROD **	1			1
28	VRC24180	ROD, PISTON, 6.5"-8.0" PISTONS	1			1
29	VRS24800	PISTON, 8.0" DA CYLINDER, AL	1			1
29A	VRS24800LA	PISTON, 8.0" DA CYLINDER, 2-PIECE ASSEMBLY, AL	1			1
30	VRC24801	RING, 8.0" PISTON	2		2	2
31	VRS24802	BAND, RIDER 8.0" PISTON	2		2	2
32	VRC24919	NUT, PISTON	1			1
33	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
34	VRC23107	SCREW, PACKING CASE	4			
35	VRS25110	NAMEPLATE, VRS CYLINDER	1			
36	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.13 9.5-inch Double-acting Cylinder and Piston Parts



9.5-INCH DOUBLE-ACTING CYLINDER AND PISTON

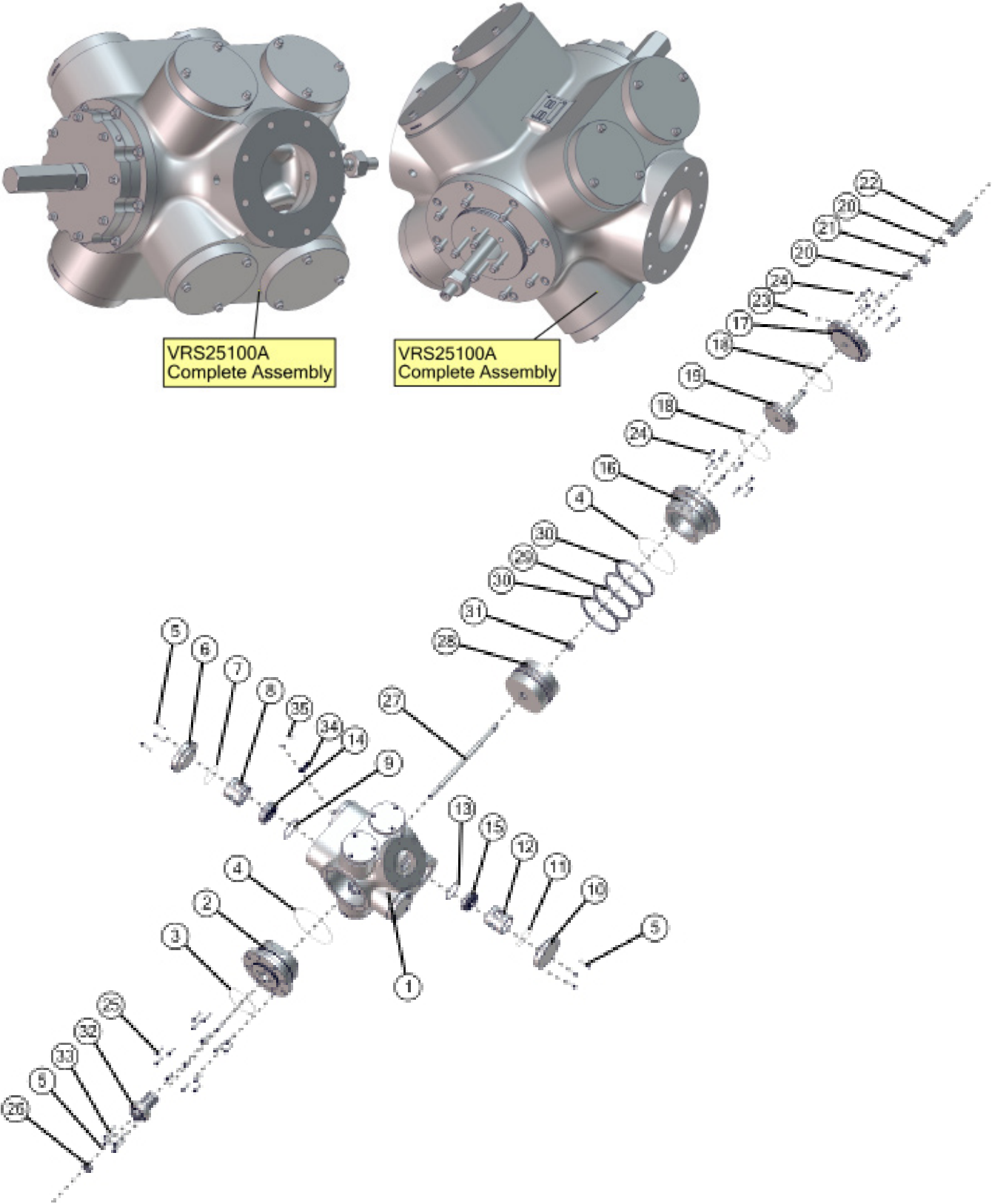
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25950A	CYLINDER, 9.5" DA, ASSEMBLY				
1	VRS25950	CYLINDER, 9.5" DA	1			
2	VRS25951	HEAD, CRANK-END, 9.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRS25952	O-RING, HEAD, CRANK AND OUTER END, 9.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5" AND 10.0" CYLINDER	4			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5, 7.0, 9.5, 10.0" CYLINDER	4	4	4	4
8	VRS25956	RETAINER, VALVE, SUCTION, 9.5" CYLINDER	4			
9	VRS25655	GASKET, SUCTION VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	4	4	4	4
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	4			
11	VRS25704	O-RING, COVER, DISCHARGE VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	4	4	4	4
12	VRS25958	RETAINER, VALVE, DISCHARGE, 9.5" CYL	4			
13	VRS25705	GASKET, DISCHARGE VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYL.	4	4	4	4
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	4	4		4
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	4	4		4
16	VRS27951	POCKET, OUTER HEAD, 9.5" VVCP	1			
17	VRS27953	COVER, POCKET, 9.5"-10.0" VVCP	1			
18	VRS27954	O-RING, POCKET COVER AND PISTON, 9.5"-10.0" VVCP	2			2
19	VRS27957A	PISTON AND STEM ASSEMBLY, 9.5"-10.0" VVCP	1			1
20	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
21	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
22	VRC27101	COVER, VVCP ADJUSTING STEM	1			
23	VRC27109	GREASE ZERK, VVCP	1			
24	VRC25017	SCREW, VALVE COVER AND VVCP	16			
25	VRC25007	SCREW, HEAD, CRANK-END	8			
26	VRC24909	NUT, JAM, PISTON ROD **	1			1
27	VRS24190	ROD, PISTON, 9.5"-10.0" VRS PISTONS	1			1
28	VRS24950A	PISTON, 9.5" DA CYLINDER, 2-PIECE ASSEMBLY AL	1			1
29	VRS24951	RING, 9.5" PISTON	2		2	2
30	VRS24952	BAND, RIDER, 9.5" PISTON	2		2	2
31	VRC24919	NUT, PISTON	1			1
32	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
33	VRC23107	SCREW, PACKING CASE	4			
34	VRS25110	NAMEPLATE, VRS CYLINDER	1			
35	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

4.14 10.0-inch Double-acting Cylinder and Piston Parts



10.0-INCH DOUBLE-ACTING CYLINDER AND PISTON

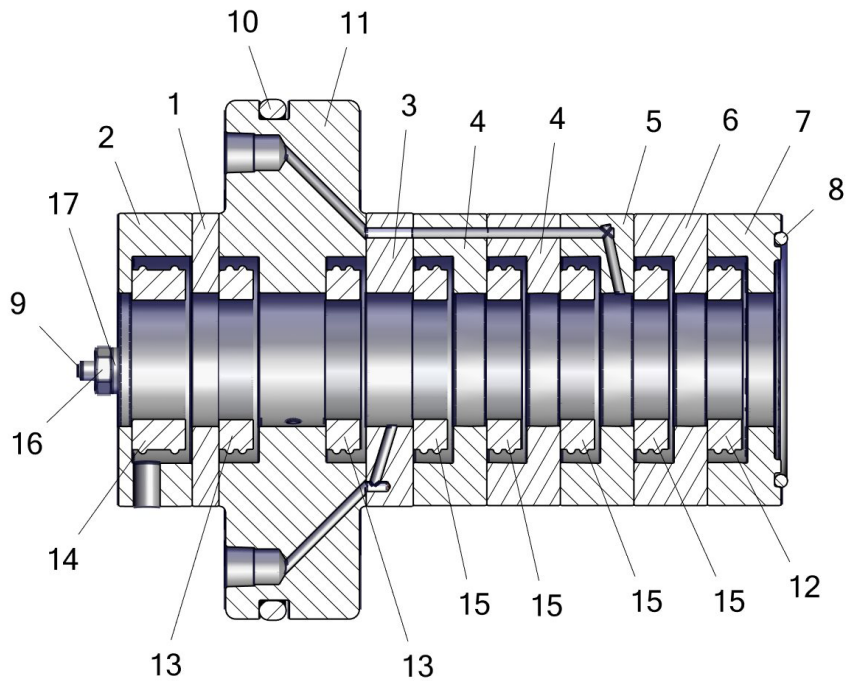
NO.	PART NO.	DESCRIPTION	QTY.	REC. SPARE PARTS		
				6 MOS	1 YR	2 YRS
	VRS25100A	CYLINDER, 10.0" DA, ASSEMBLY				
1	VRS25100	CYLINDER, 10.0" DA	1			
2	VRS25101	HEAD, CRANK-END, 10.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRS25102	O-RING, HEAD, CRANK AND OUTER END, 10.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5" AND 10.0" CYLINDER	4			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	4	4	4	4
8	VRS25106	RETAINER, VALVE, SUCTION, 10.0" DA CYLINDER	4			
9	VRS25655	GASKET, SUCTION VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	4	4	4	4
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	4			
11	VRS25704	O-RING, COVER, DISCHARGE VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	4	4	4	4
12	VRS25108	RETAINER, VALVE, DISCHARGE, 10.0" DA CYLINDER	4			
13	VRS25705	GASKET, DISCHARGE VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYL.	4	4	4	4
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	4	4		4
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	4	4		4
16	VRS27101	POCKET, OUTER HEAD, 10.0" VVCP	1			
17	VRS27953	COVER, POCKET, 9.5"-10.0" VVCP	1			
18	VRS27954	O-RING, POCKET COVER AND PISTON, 9.5"-10.0" VVCP	2			2
19	VRS27957A	PISTON AND STEM ASSEMBLY, 9.5"-10.0" VVCP	1			1
20	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			
21	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
22	VRC27101	COVER, VVCP ADJUSTING STEM	1			
23	VRC27109	GREASE ZERK, VVCP	1			
24	VRC25017	SCREW, VALVE COVER AND VVCP	16			
25	VRC25007	SCREW, HEAD, CRANK-END	8			
26	VRC24909	NUT, JAM, PISTON ROD **	1			1
27	VRS24190	ROD, PISTON, 9.5"-10.0" VRS PISTONS	1			1
28	VRS24100A	PISTON, 10.0" DA CYLINDER, 2-PIECE ASSEMBLY, AL	1			1
29	VRS24101	RING, 10.0" PISTON	2		2	2
30	VRS24102	BAND, RIDER, 10.0" PISTON	2		2	2
31	VRC24919	NUT, PISTON	1			1
32	VRC23001A	CASE, PACKING, ASSEMBLY ***	1			1
33	VRC23107	SCREW, PACKING CASE	4			
34	VRS25110	NAMEPLATE, VRS CYLINDER	1			
35	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

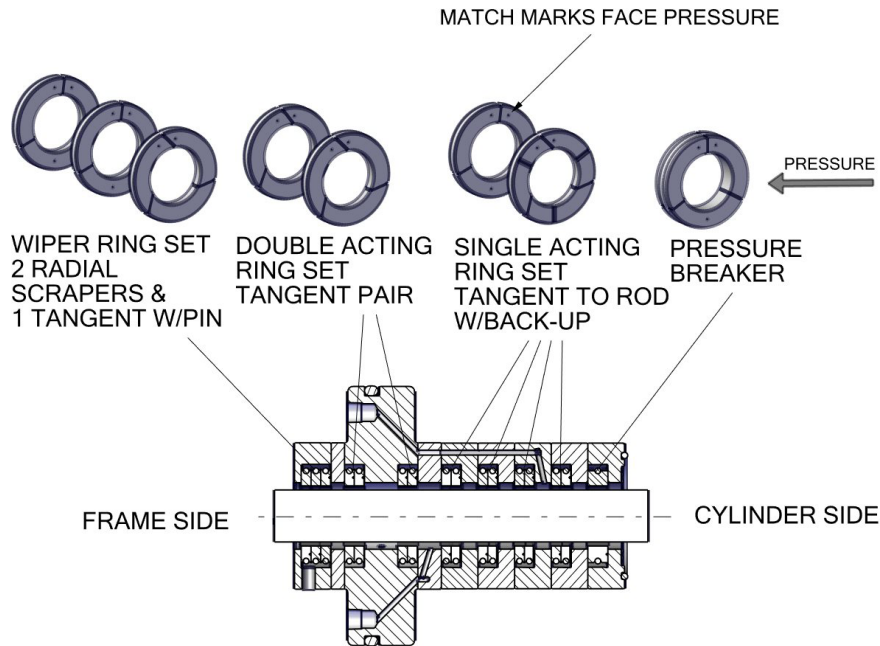
4.15 Pressure Packing, Piston Rod for Double-acting Cylinders



PISTON ROD PACKING CASE

NO.	PART NO.	DESCRIPTION	QTY.
	VRC23001A	CASE, PACKING ASSEMBLY	1
1	VRC23321	SPACER, PACKING CASE	1
2	VRC23351	CUP, PACKING, WIPER	1
3	VRC23311	SPACER, PRIMARY VENT	1
4	VRC23241	CUP, PACKING, CENTER	2
5	VRC23231	CUP, PACKING LUBE	1
6	VRC23221	CUP, PACKING, PLAIN	1
7	VRC23211	CUP, PACKING, BOTTOM	1
8	VRC23106	GASKET, WIRE, PACKING CASE NOSE	1
9	VRC23118	STUD, PACKING CASE	3
10	VRC23104	O-RING, PACKING CASE, MOUNTING FLANGE	1
11	VRC23201	FLANGE, PACKING CASE	1
12	VRC23411	RING, PACKING, PRESSURE BREAKER	1
13	VRC23431	RING, PACKING, DOUBLE-ACTING	2
14	VRC23441	RING, PACKING, WIPER	1
15	VRC23421	RING, PACKING, SINGLE-ACTING	4
16	VRC23109	NUT, LOCK, PACKING CASE STUD	3
17	VRC23115	WASHER, SEAL, PACKING CASE STUD	3

4.16 Piston Rod Pressure Packing Kits for Double-acting Cylinders



IMPORTANT: Packing rings are to be installed with the punch mark pointing toward the pressure side.

Frame Side	Wiper Ring (1) Set of (3) (VRC23441)	Pressure Side
	Double-acting Ring Set (2) (VRC23431)	
	Primary Vent	
	Single-acting Ring Sets (3) (VRC23421)	
	Oil Supply	
	Single-acting Ring Set (1) (VRC23421)	
	Pressure Breaker Ring (VRC23411)	

PISTON ROD PRESSURE PACKING KITS FOR DA AND STEEPLE CYLINDERS

PART NO.	DESCRIPTION	QTY.
VRC23001A	CASE, PACKING ASSEMBLY, COMPLETE	1
VRC23501	RING KIT, PACKING RENEWAL WITH PARTS INCLUDE: O-RING, NOSE GAS-KET, NUTS AND WASHERS	1 (KIT)
VRC23551	RING KIT, PACKING RENEWAL RINGS ONLY	1 (KIT)

4.17 Cylinder O-ring and Gasket Kits – Double-acting Cyl.

CYLINDER O-RING AND GASKET KITS – DOUBLE-ACTING		
PART NO.	DESCRIPTION	QTY.
VRS25250K	O-RING AND GASKET KIT, 2.5-INCH DOUBLE-ACTING CYLINDER	1
VRS25300K	O-RING AND GASKET KIT, 3.0-INCH DOUBLE-ACTING CYLINDER	1
VRS25350K	O-RING AND GASKET KIT, 3.5-INCH DOUBLE-ACTING CYLINDER	1
VRS25400K	O-RING AND GASKET KIT, 4.0-INCH DOUBLE-ACTING CYLINDER	1
VRS25450K	O-RING AND GASKET KIT, 4.5-INCH DOUBLE-ACTING CYLINDER	1
VRS25500K	O-RING AND GASKET KIT, 5.0-INCH DOUBLE-ACTING CYLINDER	1
VRS25550K	O-RING AND GASKET KIT, 5.5-INCH DOUBLE-ACTING CYLINDER	1
VRS25600K	O-RING AND GASKET KIT, 6.0-INCH DOUBLE-ACTING CYLINDER	1
VRS25650K	O-RING AND GASKET KIT, 6.5-INCH DOUBLE-ACTING CYLINDER	1
VRS25700K	O-RING AND GASKET KIT, 7.0-INCH DOUBLE-ACTING CYLINDER	1
VRS25750K	O-RING AND GASKET KIT, 7.5-INCH DOUBLE-ACTING CYLINDER	1
VRS25800K	O-RING AND GASKET KIT, 8.0-INCH DOUBLE-ACTING CYLINDER	1
VRS25950K	O-RING AND GASKET KIT, 9.5-INCH DOUBLE-ACTING CYLINDER *	1
VRS25100K	O-RING AND GASKET KIT, 10.0-INCH DOUBLE-ACTING CYLINDER *	1
All DA cylinder O-ring and gasket kits include:		
2 – O-rings, head, crank and outer end		2 – O-rings, cover, discharge valve
1 – O-ring, head, crank-end to frame		2 – Gasket, suction valve seat
2 – O-rings, cover, suction valve		2 – Gasket, discharge valve seat
* Kits for 9.5", 10.0" CYLinders have 4 each valve cover O-rings and valve seat gaskets		

4.18 VVCP Piston and Stem Assemblies

VVCP PISTON AND STEM ASSEMBLIES		
PART NO.	DESCRIPTION	QTY.
VRC27357A	PISTON AND STEM ASSEMBLY, 3.5"-4.0" VVCP	1
VRC27457A	PISTON AND STEM ASSEMBLY, 4.5"-5.0" VVCP	1
VRC27557A	PISTON AND STEM ASSEMBLY, 5.5"-6.0" VVCP	1
VRC27657A	PISTON AND STEM ASSEMBLY, 6.5"-7.0" VVCP	1
VRC27757A	PISTON AND STEM ASSEMBLY, 7.5"-8.0" VVCP	1
VRS27957A	PISTON AND STEM ASSEMBLY, 9.5"-10.0" VVCP	1
VVCP, piston and stem assembly includes:		Piston and piston ring *
VVCP adjusting stem		Spring pin
* Piston size is determined by VVCP size.		

4.19 Piston Rod Jam Nuts Used for Balancing

PISTON ROD JAM NUTS FOR BALANCING (RECIPROCATING WEIGHT)		
PART NO.	DESCRIPTION	QTY.
VRC24909	Nut, Jam, Piston Rod, Standard (0.83#)	1
VRC24949	Nut, Jam, Piston Rod, Heavy (3.66#) *	1
VRC24929	Nut, Jam, Piston Rod, Extra Heavy (5.81#) *	1
*Nut requires piston jam nut bar tool VRC29499		

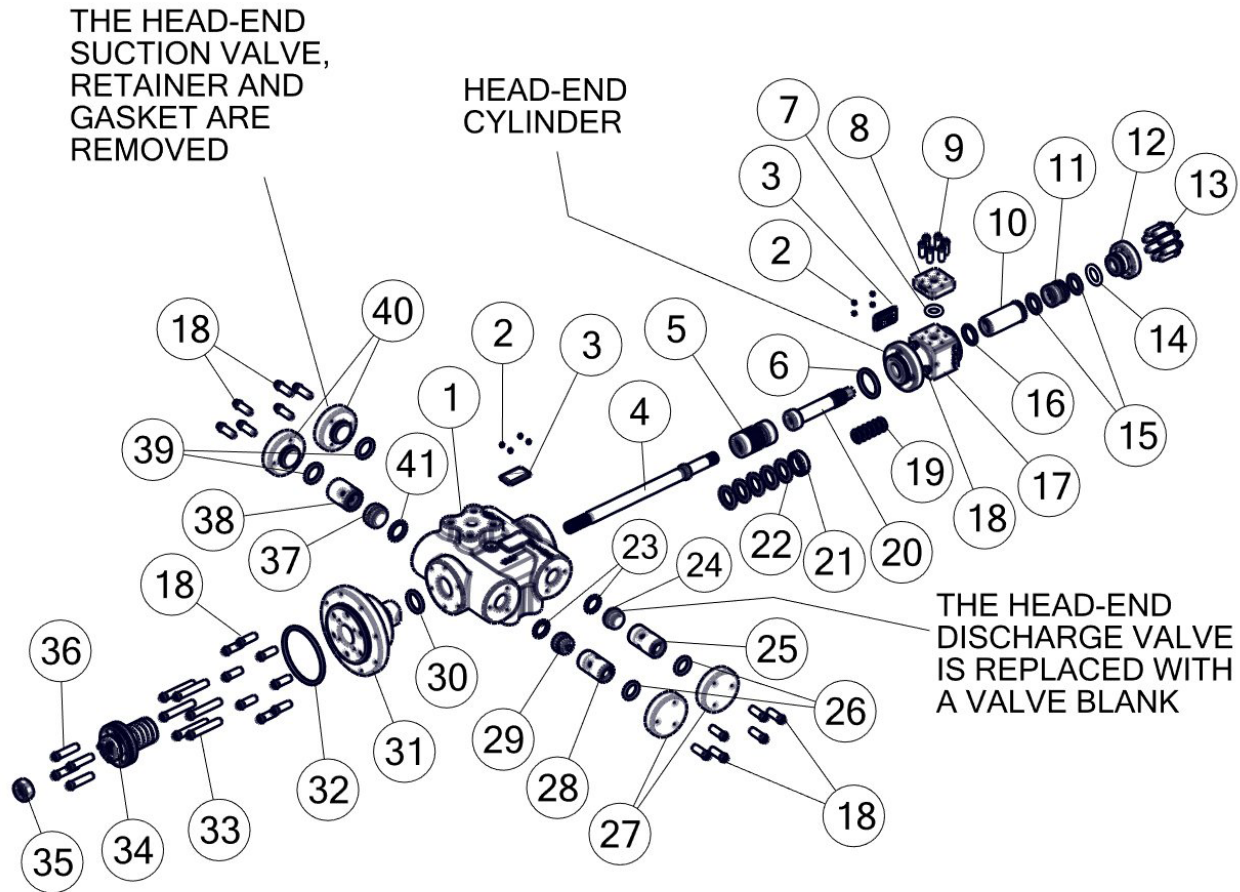
4.20 Double-acting Cylinder and Piston/Rod Assemblies

DA CYLINDER AND PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)		
PART NO.	DESCRIPTION	QTY.
Double-acting Cylinders		
2.5 AND 3.0-INCH DOUBLE-ACTING CYLINDER AND PISTON / ROD		
VRS25250A	CYLINDER, 2.5" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24250A-CI	PISTON AND ROD ASSEMBLY, 2.5" DA CYLINDER, CI	1
VRS25300A	CYLINDER, 3.0" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24300A	PISTON AND ROD ASSEMBLY, 3.0" DA CYLINDER, CI	1
3.5 AND 4.0-INCH DOUBLE-ACTING CYLINDER AND PISTON / ROD		
VRS25350A	CYLINDER, 3.5" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24350A-CI	PISTON AND ROD ASSEMBLY, 3.5" DA CYLINDER, CI	1
VRS25400A	CYLINDER, 4.0" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24400A-CI	PISTON AND ROD ASSEMBLY, 4.0" DA CYLINDER, CI	1
4.5 AND 5.0-INCH DOUBLE-ACTING CYLINDER AND PISTON / ROD		
VRS25450A	CYLINDER, 4.5" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24450A-CI	PISTON AND ROD ASSEMBLY, 4.5" DA CYLINDER, CI	1
VRS24455A-AL	PISTON AND ROD ASSEMBLY, 4.5" DA CYLINDER, AL	1
VRS25500A	CYLINDER, 5.0" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24500A-CI	PISTON AND ROD ASSEMBLY, 5.0" DA CYLINDER, CI	1
VRS24505A-AL	PISTON AND ROD ASSEMBLY, 5.0" CYLINDER, AL	1
5.5 AND 6.0-INCH DOUBLE-ACTING CYLINDER AND PISTON / ROD		
VRS25550A	CYLINDER, 5.5" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24550A-AL	PISTON AND ROD ASSEMBLY, 5.5" DA CYLINDER, AL	1
VRS25600A	CYLINDER, 6.0" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24600A-AL	PISTON AND ROD ASSEMBLY, 6.0" DA CYLINDER, AL	1
6.5 AND 7.0 DOUBLE-ACTING CYLINDER AND PISTON / ROD		
VRS25650A	CYLINDER, 6.5" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24650A-AL	PISTON AND ROD ASSEMBLY, 6.5" DA CYLINDER, AL	1
VRS25700A	CYLINDER, 7.0" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24700A-AL	PISTON AND ROD ASSEMBLY, 7.0" DA CYLINDER, AL	1
7.5 AND 8.0 DOUBLE-ACTING CYLINDER AND PISTON / ROD		
VRS25750A	CYLINDER, 7.5" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24750A-AL	PISTON AND ROD ASSEMBLY, 7.5" DA CYLINDER, AL	1
VRS25800A	CYLINDER, 8.0" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24800A-AL	PISTON AND ROD ASSEMBLY, 8.0" DA CYLINDER, AL	1
9.5 AND 10.0 DOUBLE-ACTING CYLINDER AND PISTON / ROD		
VRS25950A	CYLINDER, 9.5" DA, VRS COMPRESSOR ASSEMBLY	1
VRS24950A	PISTON AND ROD ASSEMBLY, 9.5" DA CYLINDER, AL	1
VRS25100A	CYLINDER, 10.0" DA, ASSEMBLY	1
VRS24100A	PISTON AND ROD ASSEMBLY, 10.0" DA CYLINDER, AL	1
All piston/rod assemblies include:		
Piston	Rider band	
Piston rod	Piston nut	
Piston rings	Piston rod jam nut (standard)*	

*A heavier jam nut may be used if required for balancing. See section 4.19.

5 Steeple Cylinder and Piston

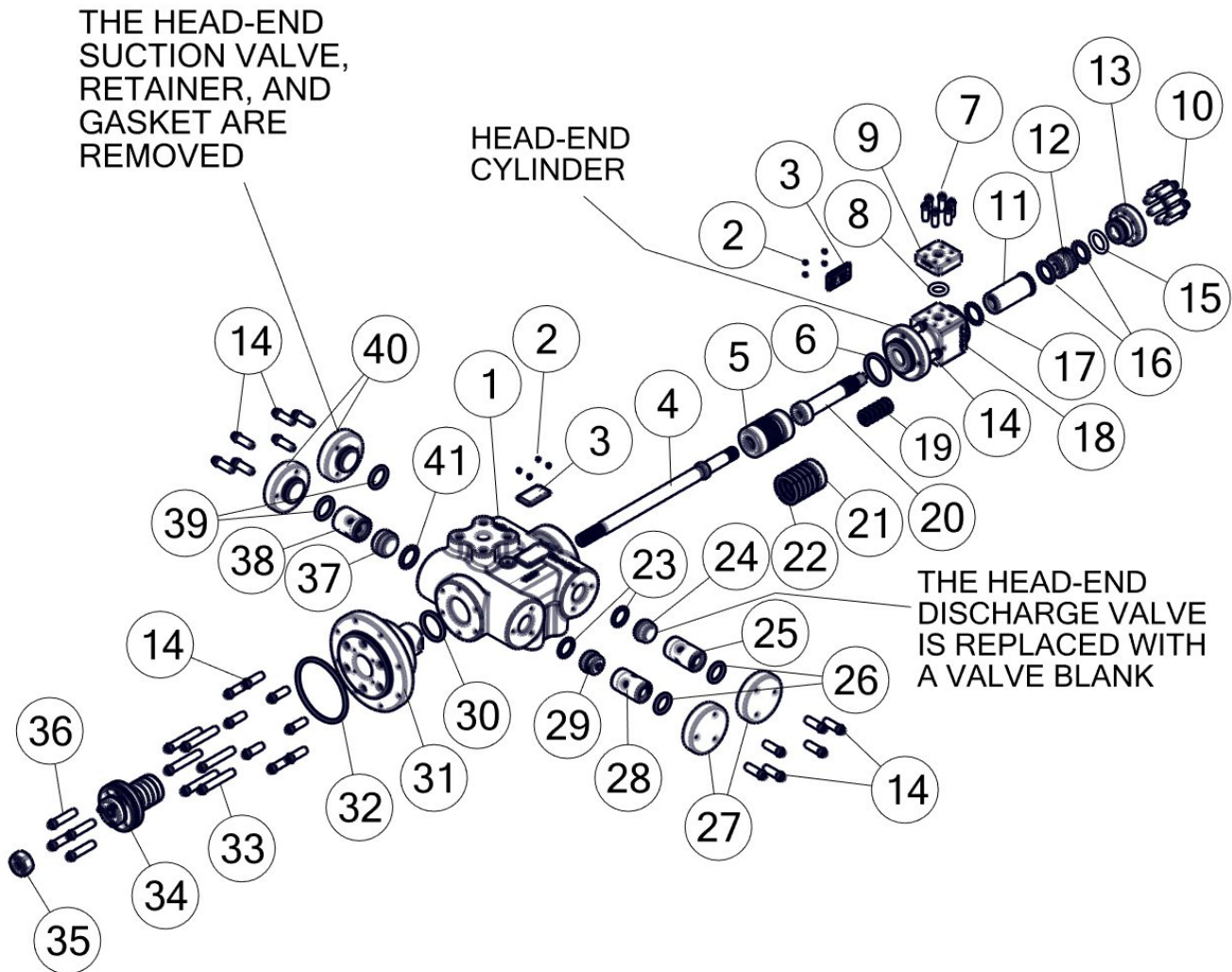
5.1 2.5 × 1.375-inch Steeple Cylinder Parts



NOTE: FOR STEEPLE CYLINDER APPLICATIONS, THIS OTHERWISE DOUBLE ACTING CYLINDER IS USED AS THE CRANK-END CYLINDER OF THE STEEPLE ASSEMBLY

2.5 × 1.375 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
1	VRC25260	CYLINDER, 2.5" SACE, MODIFIED HEAD	1			
2	B577A	PIN, NAMEPLATE	8			
3	VRS25110	NAMEPLATE, VRS CYLINDER	2			
4	VRC24130	ROD, PISTON, 2.5-3.0" PISTONS	1			1
5	VRC24259	PISTON, 2.5" SACE X 1.375" SAHE STEEPLE CYLINDER, CI	1			1
6	VRC25504	O-RING, 3.250 OD .125 W	1	1	1	1
7	VRCC5127	O-RING, SUCTION FLANGE, 1.125-1.375	1	1	1	1
8	VRCC5126	FLANGE, SUCTION, 3/4" NPT, 1.125-1.375	1			
9	VRC28467	SCREW 12-POINT 3/8-16 X 1-1/4	6			
10	VRCC5141	LINER, CYLINDER 1.375" SAHE	1			
11	VRCC6125A	VALVE, CONCENTRIC, 1.125-1.375	1	1		1
12	VRCC5128	FLANGE/RTR, DISCHARGE, 3/4" NPT, 1.125-1.375	1			
13	VRC28257	SCREW 12-POINT 3/8-16 X 1-1/2	8			
14	VRCC5124	O-RING WITH PARBAK, DISCHARGE FLANGE, 1.125-1.375	1	1	1	1
15	VRCC5125	GASKET, VALVE SEAT & TOP, 1.125-1.375	2	1	1	1
16	VRCC5122	GASKET, LINER, CYLINDER, 1.125-1.375	1	1	1	1
17	VRCC5120	CYLINDER, STEEPLE, 1.125-1.375	1			
18	VRC25077	SCREW 12-POINT 1/2-13 X 2	24			
19	VRCC4141	RING, 1.375" CNG PISTON, BUTT CUT	6		6	6
20	VRCC4140	PISTON, CNG, 1.375" SAHE	1			
21	VRC24252	BAND, RIDER, 2.5 INCH PISTON	1		1	1
22	VRS24251	RING, 2.5 INCH PISTON	5		4	4
23	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.5-3.0" CYLINDER	2	2	2	2
24	VRC26399	BLANK, VALVE, DISCHARGE, 2.25-3.0" SACE CYLINDER	1			
25	VRC25258	RETAINER, VALVE, DISCHARGE, 2.5" DA CYLINDER	1			
26	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.5-3.0" CYLINDER	2	2	2	2
27	VRC25303	COVER, VALVE, DISCHARGE, 2.5-3.0" CYLINDER	2			
28	VRC25258SP	RETAINER, VALVE, DISCHARGE, 2.5" SP CYLINDER	1			
29	VRS26347A	VALVE, DISCHARGE, 2.5-3.0" CYLINDER PC, HEAVY	1	1		1
30	VRC25252	O-RING, HEAD, 2.5 INCH CYLINDER	1	1	1	2
31	VRS25251	HEAD, CRANK END, 2.5" CYLINDER	1			
32	VRC25262	O-RING, HEAD, CRANK-END 2.5 CYLINDER	1	1		1
33	VRS41217	SCREW 12-POINT 1/2-13 X 4-1/4	6			
34	VRC23001A	CASE, PACKING, ASSEMBLY	1			1
35	VRC24909	NUT, JAM, PISTON ROD	1			1
36	VRC23107	SCREW 12-POINT 1/2-13 X 3	4			
37	VRS26335A	VALVE, SUCTION, 2.5-3.0" CYLINDER, PC, MEDIUM	1	1		1
38	VRC25256SP	RETAINER, VALVE, SUCTION, 2.5" SP CYLINDER	1			
39	VRC25254	O-RING, COVER, SUCTION VALVE, 2.5-3.0" CYLINDER	2	2	2	2
40	VRC25253	COVER, VALVE, SUCTION, 2.5-3.0" CYLINDER	2			
41	VRC25255	GASKET, SUCTION VALVE SEAT, 2.5-3.0" CYLINDER	1	1	1	1

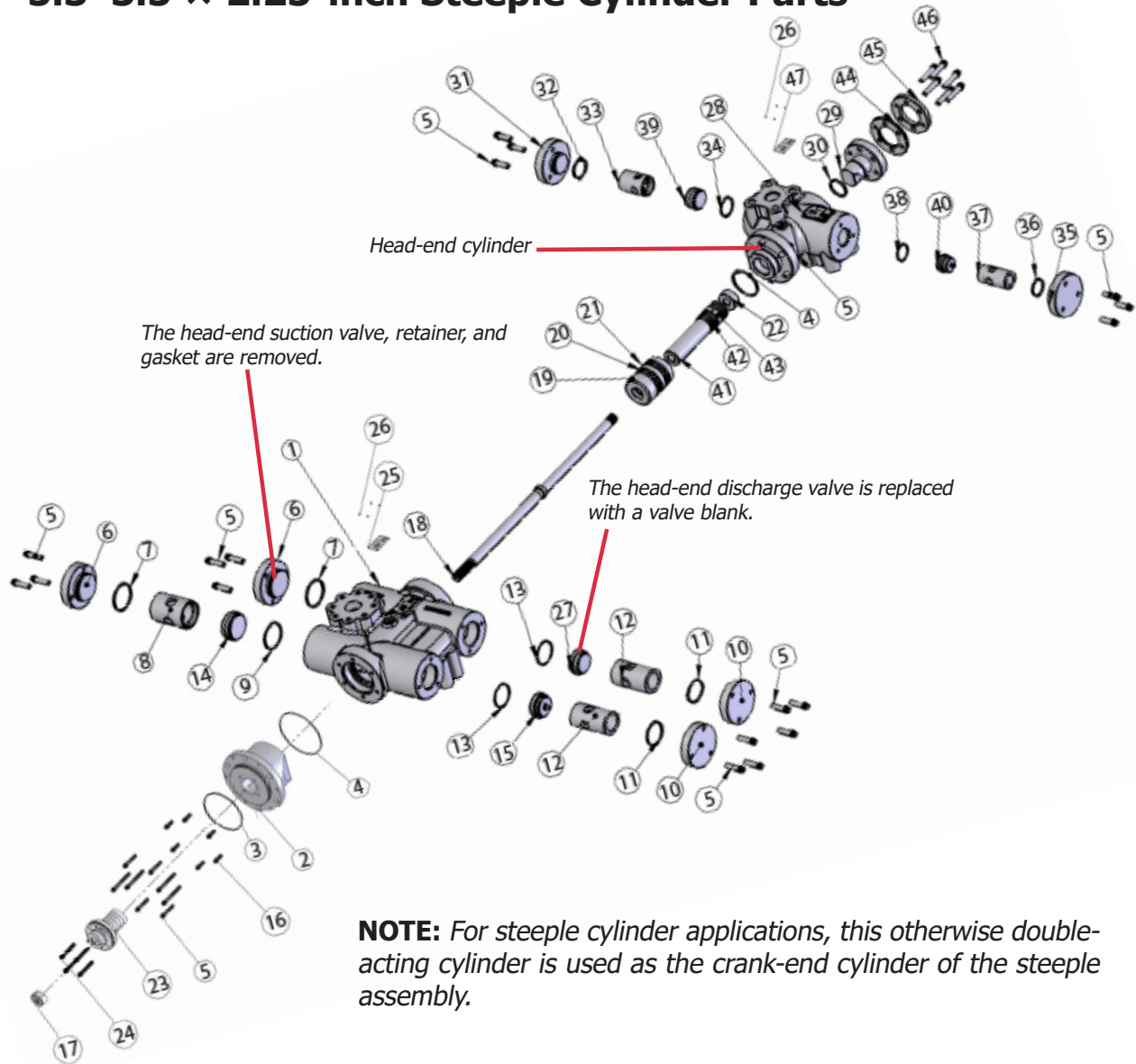
5.2 3.0 × 1.375-inch Steeple Cylinder Parts



NOTE: FOR STEEPLE CYLINDER APPLICATIONS, THIS OTHERWISE DOUBLE ACTING CYLINDER IS USED AS THE CRANK-END CYLINDER OF THE STEEPLE ASSEMBLY

3.0 × 1.375 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
1	VRC25310	CYLINDER, 3.0" SACE, MODIFIED HEAD	1			
2	B577A	PIN, NAMEPLATE	8			
3	VRS25110	NAMEPLATE, VRS CYLINDER	2			
4	VRC24130	ROD, PISTON, 2.5-3.0" PISTONS	1			1
5	VRC24312	PISTON, 3.0" SACE X 1.375" SAHE STEEPLE CYLINDER, CI	1			1
6	VRC25504	O-RING, 3.250 OD .125 W	1	1	1	1
7	VRCC5127	O-RING, SUCTION FLANGE, 1.125-1.375	1	1	1	1
8	VRCC5126	FLANGE, SUCTION, 3/4" NPT, 1.125-1.375	1			
9	VRC28467	SCREW 12 PT 3/8-16 X 1-1/4	6			
10	VRCC5141	LINER, CYLINDER 1.375" SAHE	1			
11	VRCC6125A	VALVE, CONCENTRIC, 1.125-1.375	1	1		1
12	VRCC5128	FLANGE/RTR, DISCHARGE, 3/4" NPT, 1.125-1.375	1			
13	VRC28257	SCREW 12-POINT 3/8-16 X 1-1/2	8			
14	VRCC5124	O-RING WITH PARBAK, DISCHARGE FLANGE, 1.125-1.375	1	1	1	1
15	VRCC5125	GASKET, VALVE SEAT AND TOP, 1.125-1.375	2	1	1	1
16	VRCC5122	GASKET, LINER, CYLINDER, 1.125-1.375	1	1	1	1
17	VRCC5120	CYLINDER, STEEPLE, 1.125-1.375	1			
18	VRC25077	SCREW 12-POINT 1/2-13 X 2	24			
19	VRCC4141	RING, 1.375" CNG PISTON, BUTT CUT	6		6	6
20	VRCC4140	PISTON, CNG, 1.375" SAHE	1			
21	VRC24302	BAND, RIDER, 3.0 INCH PISTON	1		1	1
22	VRS24301	RING, 3.0 INCH PISTON	5		4	4
23	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.5-3.0" CYLINDER	2	2	2	2
24	VRC26399	BLANK, VALVE, DISCHARGE, 2.25-3.0" SACE CYLINDER	1			
25	VRC25308	RETAINER, VALVE, DISCHARGE, 3.0" CYLINDER	1			
26	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.5-3.0" CYLINDER	2	2	2	2
27	VRC25303	COVER, VALVE, DISCHARGE, 2.5-3.0" CYLINDER	2			
28	VRC25308SP	RETAINER, VALVE, DISCHARGE, 3.0" SP CYLINDER	1			
29	VRS26347A	VALVE, DISCHARGE, 2.5-3.0" CYLINDER PC, HEAVY	1	1		1
30	VRC25262	O-RING, HEAD, 3.0 INCH CYLINDER	1	1	1	2
31	VRS25301	HEAD, CRANK END, 3.0" CYL	1			
32	VRC25302	O-RING, HEAD, CRANK-END, 3.0" CYLINDER	1	1		1
33	VRS41217	SCREW 12-POINT 1/2-13 X 4-1/4	6			
34	VRC23001A	CASE, PACKING, ASSEMBLY	1			1
35	VRC24909	NUT, JAM, PISTON ROD	1			1
36	VRC23107	SCREW 12-POINT 1/2-13 X 3	4			
37	VRS26335A	VALVE, SUCTION, 2.5-3.0" CYLINDER, PC, MEDIUM	1	1		1
38	VRC25306SP	RETAINER, VALVE, SUCTION, 3.0" SP CYLINDER	1			
39	VRC25254	O-RING, COVER, SUCTION VALVE, 2.5-3.0" CYLINDER	2	2	2	2
40	VRC25253	COVER, VALVE, SUCTION, 2.5-3.0" CYLINDER	2			
41	VRC25255	GASKET, SUCTION VALVE SEAT, 2.5-3.0" CYLINDER	1	1	1	1

5.3 3.5 × 2.25-inch Steeple Cylinder Parts



3.5 × 2.25 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25121A	CYLINDER, STEEPLE, 2.25" SAHE × 3.5" SACE, ASSEMBLY				
1	VRS25350	CYLINDER, 3.5" DA	1			
2	VRS25351	HEAD, CRANK END, 3.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25352	O-RING, HEAD, CRANK AND OUTER END, 3.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2			
7	VRC25354	O-RING, COVER, SUCTION VALVE, 3.5"-4.0" CYLINDER	2	2	2	2
8	VRS25356	RETAINER, VALVE, SUCTION, 3.5" DA CYLINDER	1			

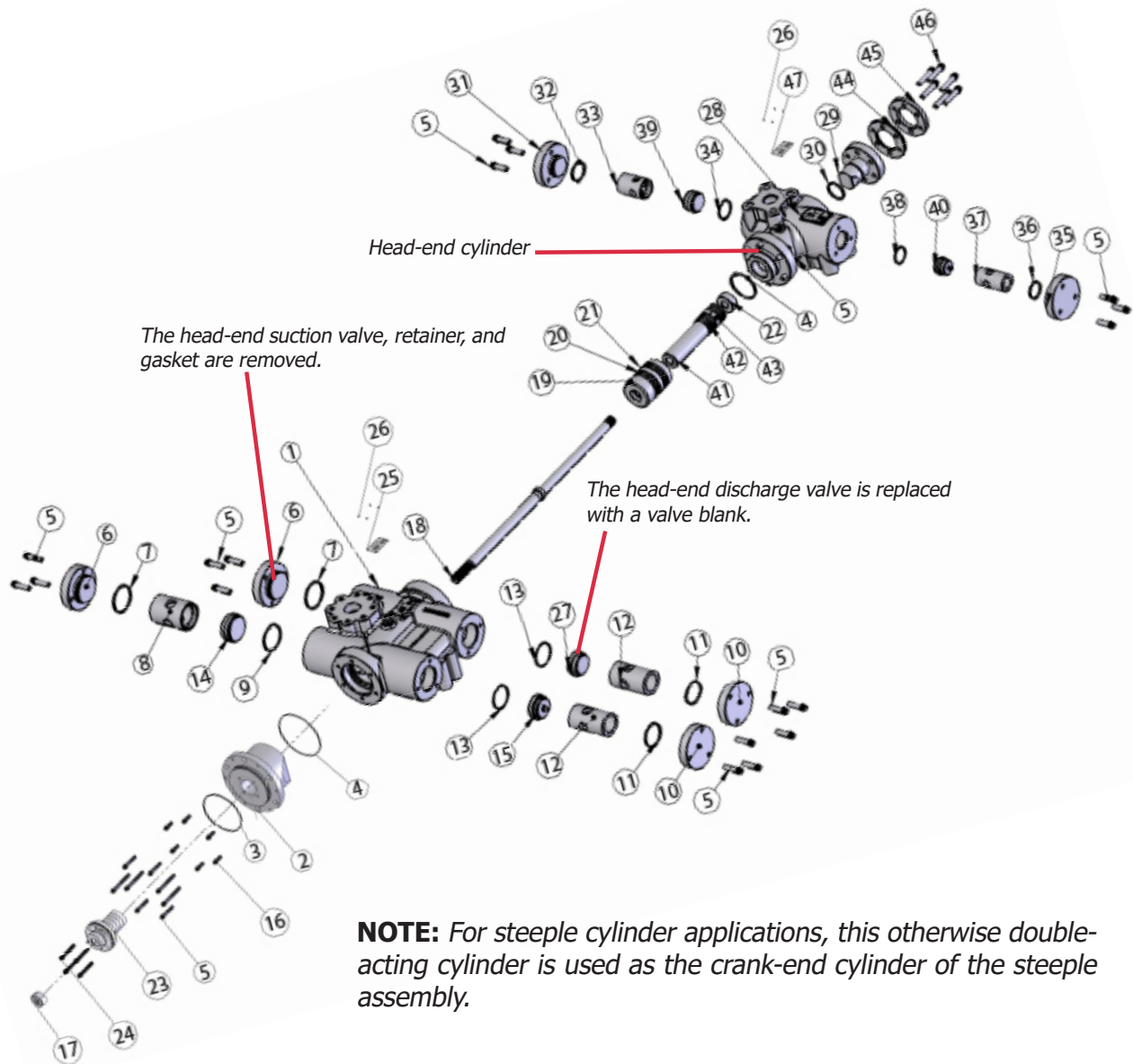
3.5 × 2.25 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
9	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
10	VRC25403	COVER, VALVE, DISCHARGE, 3.5-4.0" CYL. AND 3.0"-3.5" SAHE	2			
11	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
12	VRS25358	RETAINER, VALVE, DISCHARGE, 3.5" DA CYLINDER	2			
13	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
14	VRS26415A	VALVE, SUCTION, 3.5"-4.0" CYLINDER MEDIUM *	1	1		1
15	VRS26425A	VALVE, DISCHARGE, 3.5"-4.0" CYLINDER MEDIUM *	1	1		1
16	VRC25047	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24112	ROD, PISTON, 2.25" SAHE × 3.5-4.0" SACE	1			1
19	VRC24359	PISTON, 3.5" SACE STEEPLE CYLINDER, CI	1			1
20	VRC24351	RING, 3.5" PISTON	4		4	4
21	VRC24352	BAND, RIDER, 3.5" PISTON	1		1	1
22	VRC24911	NUT, PISTON, 2.25" SAHE STEEPLE	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26499	BLANK, VALVE, DISCHARGE 3.5"-4.0" SACE CYLINDER	1			
28	VRC25121	CYLINDER, STEEPLE, 2.25" SAHE × 3.5" SACE	1			
29	VRC27121	HEAD, 2.25" SAHE CYLINDER	1			
30	VRC27124	O-RING, HEAD, CRANK-END, 2.25" SAHE CYLINDER	1	1	1	1
31	VRC25253	COVER, VALVE, SUCTION, 2.25"-3.0" CYL	1			
32	VRC25254	O-RING, COVER, SUCTION VALVE, 2.25"-3.0" CYLINDER	1	1	1	1
33	VRC25256	RETAINER, VALVE, SUCTION, 2.5" DA, 2.25" SAHE CYLINDER	1			
34	VRC25255	GASKET, SUCTION VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
35	VRC25303	COVER, VALVE, DISCHARGE, 2.25"-3.0" CYLINDER	1			
36	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25"-3.0" CYLINDER	1	1	1	1
37	VRC25258	RETAINER, VALVE, DISCHARGE, 2.5" DA, 2.25" SAHE CYLINDER	1			
38	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
39	VRC26015A	VALVE, SUCTION, 2.25" AND 2.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26025A	VALVE, DISCHARGE, 2.25" AND 2.5" SAHE CYLINDER MEDIUM *	1	1		1
41	VRC24210	PISTON, 2.25" SAHE × 3.5"-4.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24211	RING, 2.25" PISTON	4		4	4
43	VRC24212	BAND, RIDER, 2.25" PISTON	1		1	1
44	VRC27126	SPACER, 2.25"-2.5" SAHE HEAD, 1/4"	1			
45	VRC27127	SPACER, 2.25"-2.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.4 4.0 × 2.25-inch Steeple Cylinder Parts



NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

4.0 × 2.25 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25122A	CYLINDER, STEEPLE, 2.25" SAHE × 4.0" SACE ASSEMBLY				
1	VRS25400	CYLINDER, 4.0" DA	1			
2	VRS25401	HEAD, CRANK END, 4.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25402	O-RING, HEAD, CRANK AND OUTER END, 4.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG AND CE HEAD, 12-POINT	2			
7	VRC25353	COVER, VALVE, SUCTION 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2			
8	VRC25354	O-RING, COVER, SUCTION VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
9	VRS25406	RETAINER, VALVE, SUCTION, 4.0" DA CYLINDER	1			1

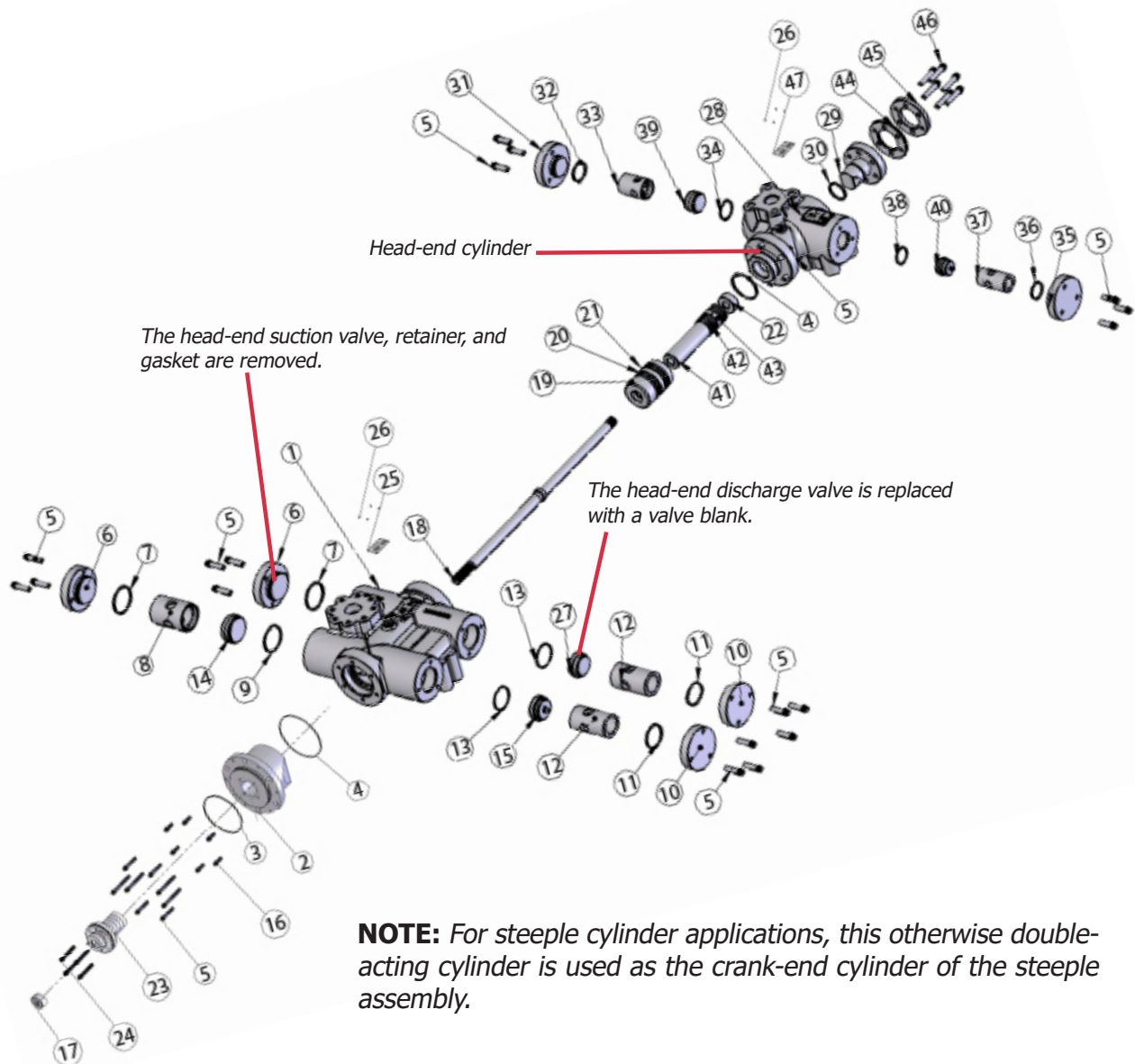
4.0 × 2.25 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
11	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2			
12	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	2	2	2	2
13	VRS25408	RETAINER, VALVE, DISCHARGE, 4.0" DA CYLINDER	2			
14	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5-4.0" CYL. AND 3.0"-3.5" SAHE	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12-POINT	24			
16	VRS26415A	VALVE, SUCTION, 3.5"-4.0" CYLINDER MEDIUM *	1	1		1
17	VRS26425A	VALVE, DISCHARGE, 3.5"-4.0" CYLINDER MEDIUM *	1	1		1
18	VRC25047	SCREW, HEAD, CRANK-END, 12-POINT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24112	ROD, PISTON, 2.25" SAHE × 3.5"-4.0" SACE	1			1
21	VRC24409	PISTON, 4.0" SACE STEEPLE CYLINDER, CI	1			1
22	VRC24401	RING, 4.0" PISTON	4		4	4
23	VRC24402	BAND, RIDER, 4.0" PISTON	1		1	1
24	VRC24911	NUT, PISTON 2.25" SAHE, STEEPLE	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
27	VRS25110	NAMEPLATE, VRS CYLINDER	1			
28	VRC21606	PIN, NAMEPLATE	8			
29	VRS26499	BLANK, VALVE, DISCHARGE 3.5"-4.0" SACE CYLINDER	1			
30	VRC25122	CYLINDER, STEEPLE, 2.25" SAHE × 4.0" SACE	1			
31	VRC27121	HEAD, 2.25" SAHE CYLINDER	1			
32	VRC27124	O-RING, HEAD, 2.25" SAHE CYLINDER	1	1	1	1
33	VRC25253	COVER, VALVE, SUCTION, 2.25"-3.0" CYL	1			
34	VRC25254	O-RING, COVER, SUCTION VALVE, 2.25"-3.0" CYLINDER	1	1	1	1
35	VRC25256	RETAINER, VALVE, SUCTION, 2.5" DA, 2.25" SAHE CYLINDER	1			
36	VRC25255	GASKET, SUCTION VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
37	VRC25303	COVER, VALVE, DISCHARGE, 2.25"-3.0" CYLINDER	1			
38	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25"-3.0" CYLINDER	1	1	1	1
39	VRC25258	RETAINER, VALVE, DISCHARGE, 2.5" DA, 2.25" SAHE CYLINDER	1			
40	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
41	VRC26015A	VALVE, SUCTION, 2.25" AND 2.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26025A	VALVE, DISCHARGE, 2.25" AND 2.5" SAHE CYLINDER MEDIUM *	1	1		1
43	VRC24210	PISTON, 2.25" SAHE × 3.5"-4.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24211	RING, 2.25" PISTON	4		4	4
45	VRC24212	BAND, RIDER, 2.25" PISTON	1		1	1
46	VRC27126	SPACER, 2.25"-2.5" SAHE HEAD, 1/4"	1			
47	VRC27127	SPACER, 2.25"-2.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
49	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.5 4.5 × 2.5-inch Steeple Cylinder Parts



NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

4.5 × 2.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25124A	CYLINDER, STEEPLE, 2.5" SAHE × 4.5" SACE ASSEMBLY				
1	VRS25450	CYLINDER, 4.5" DA	1			
2	VRS25451	HEAD, CRANK END, 4.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25452	O-RING, HEAD, CRANK AND OUTER END, 4.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER	2			
7	VRC25454	O-RING, COVER, SUCTION VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25456	RETAINER, VALVE, SUCTION, 4.5" DA CYLINDER	1			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	1	1	1	1

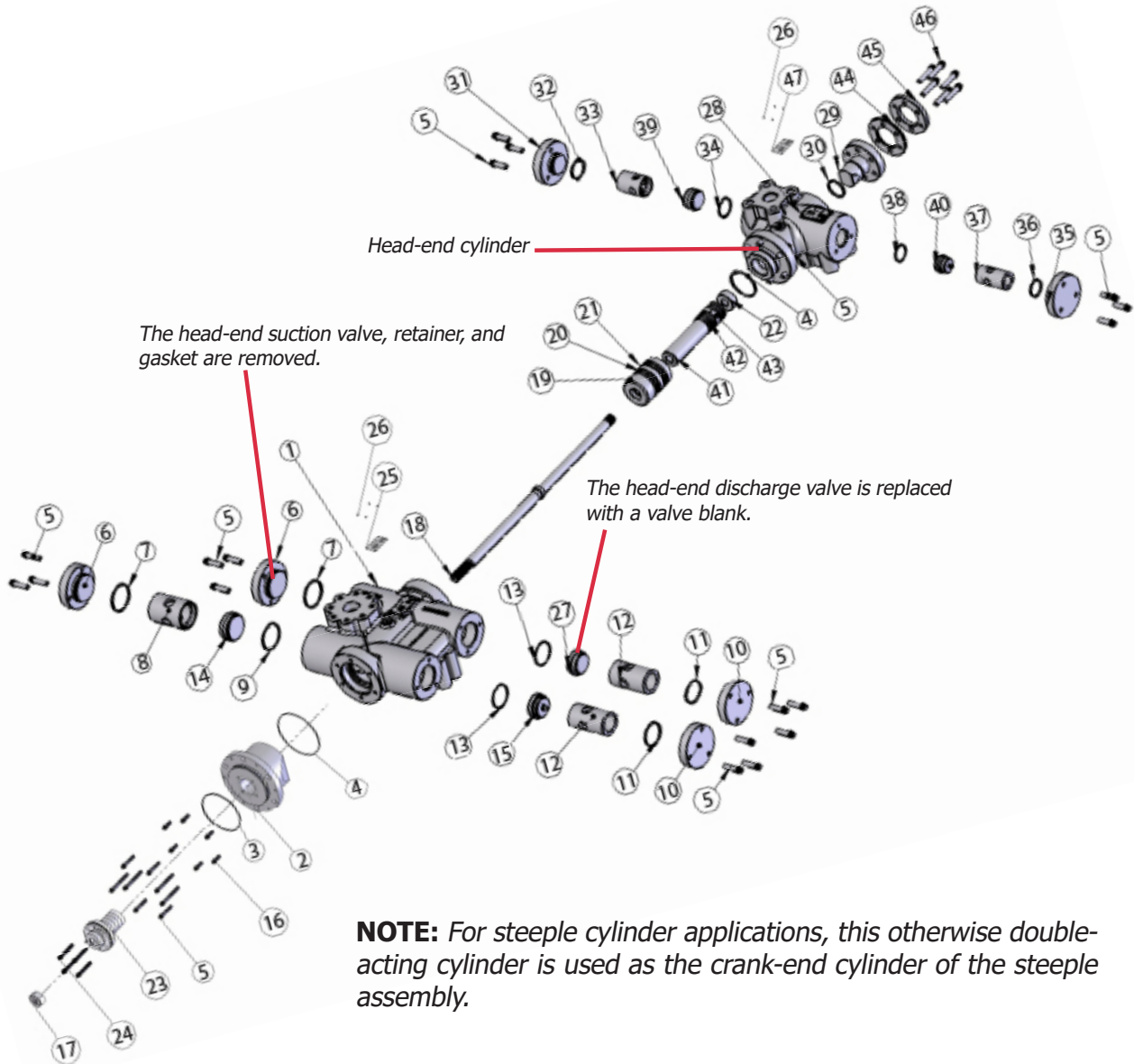
4.5 × 2.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRS25503	COVER, VALVE, DISCHARGE, 4.5"-5.0" CYLINDER	2			
11	VRC25504	O-RING, COVER, DISCHARGE VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25458	RETAINER, VALVE, DISCHARGE, 4.5" DA CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
16	VRC23107	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24111	ROD, PISTON, 2.5" SAHE × 4.5"-5.0" SACE	1			1
19	VRC24459	PISTON, 4.5" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24451	RING, 4.5" PISTON	4		4	4
21	VRC24452	BAND, RIDER, 4.5" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26599	BLANK, VALVE, DISCHARGE 4.5"-5.0" SACE CYLINDER	1			
28	VRC25124	CYLINDER, STEEPLE, 2.5" SAHE × 4.5" SACE	1			
29	VRC27125	HEAD, 2.5" SAHE CYLINDER	1			
30	VRC25252	O-RING, HEAD, CRANK-END, 2.5" SAHE CYLINDER	1	1	1	1
31	VRC25253	COVER, VALVE, SUCTION, 2.25"-3.0" CYLINDER	1			
32	VRC25254	O-RING, COVER, SUCTION VALVE, 2.25"-3.0" CYLINDER	1	1	1	1
33	VRC25161	RETAINER, VALVE, SUCTION, 2.5" SAHE CYLINDER	1			
34	VRC25255	GASKET, SUCTION VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
35	VRC25303	COVER, VALVE, DISCHARGE, 2.25"-3.0" CYLINDER	1			
36	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25"-3.0" CYLINDER	1	1	1	1
37	VRC25181	RETAINER, VALVE, DISCHARGE, 2.5" SAHE CYLINDER	1			
38	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
39	VRC26015A	VALVE, SUCTION, 2.25" AND 2.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26025A	VALVE, DISCHARGE, 2.25" AND 2.5" SAHE CYLINDER MEDIUM *	1	1		1
41	VRC24215	PISTON, 2.5" SAHE × 4.5"-5.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24251	RING, 2.5" PISTON	4		4	4
43	VRC24252	BAND, RIDER, 2.5" PISTON	1		1	1
44	VRC27126	SPACER, 2.25"-2.5" SAHE HEAD, 1/4"	1			
45	VRC27127	SPACER, 2.25"-2.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.6 4.5 × 3.0-inch Steeple Cylinder Parts



NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

4.5 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25131A	CYLINDER, STEEPLE, 3.0" SAHE × 4.5" SACE ASSEMBLY				
1	VRS25450	CYLINDER, 4.5" DA	1			
2	VRS25451	HEAD, CRANK END, 4.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25452	O-RING, HEAD, CRANK AND OUTER END, 4.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER	2			
7	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25456	RETAINER, VALVE, SUCTION 4.5" DA CYLINDER	1			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	1	1	1	1

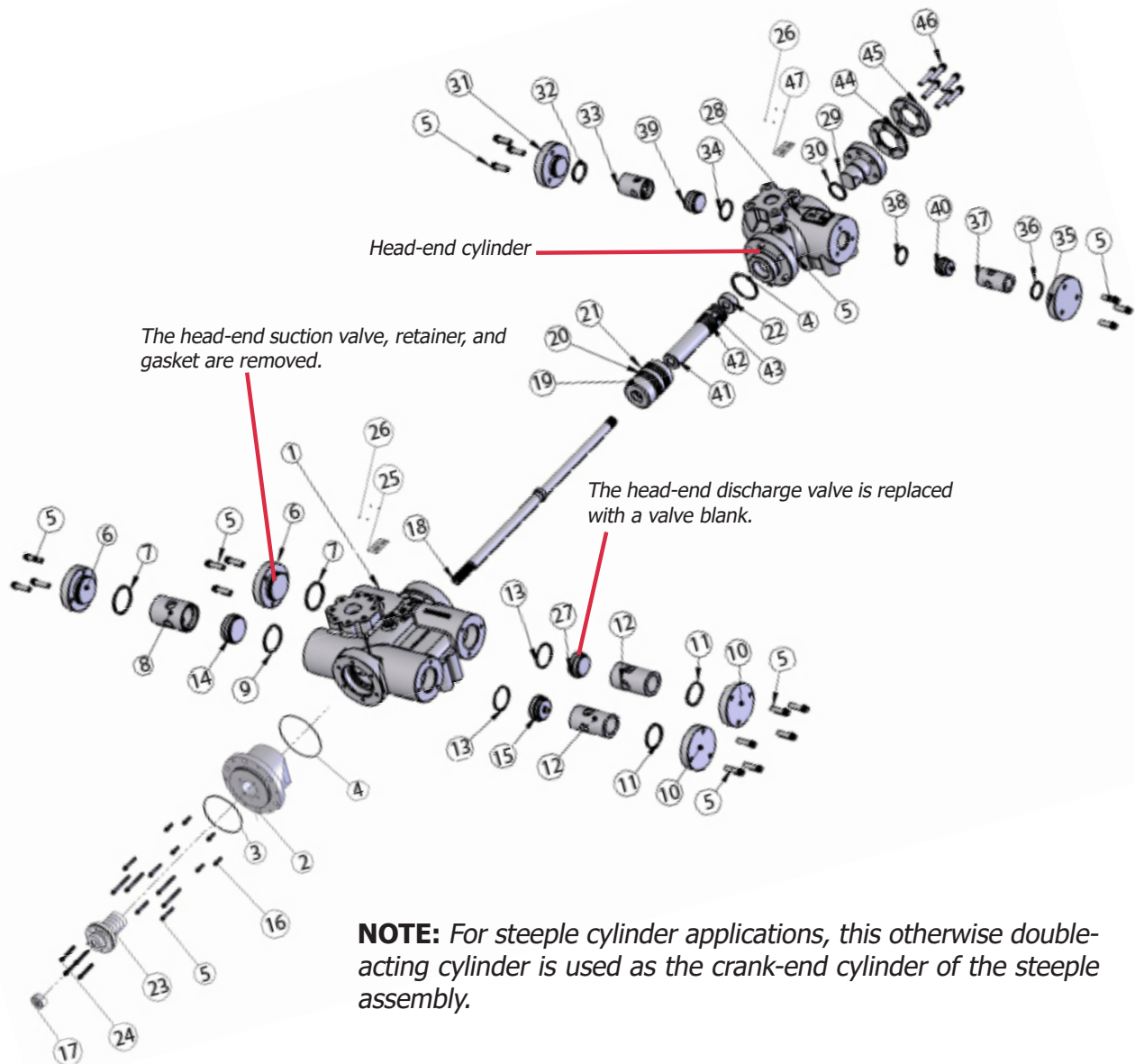
4.5 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
10	VRS25503	COVER, VALVE, DISCHARGE 4.5"-5.0" CYLINDER	2			
11	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25458	RETAINER, VALVE, DISCHARGE, 4.5" DA CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
16	VRC23107	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24113	ROD, PISTON, 3.0"-3.5" SAHE × 4.5"-5.0" SACE	1			1
19	VRC24459	PISTON, 4.5" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24451	RING, 4.5" PISTON	4		4	4
21	VRC24452	BAND, RIDER, 4.5" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26599	BLANK, VALVE, DISCHARGE, 4.5"-5.0" SACE CYLINDER	1			
28	VRC25131	CYLINDER, STEEPLE, 3.0" SAHE × 4.5" SACE	1			
29	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
30	VRC25302	O-RING, HEAD, CRANK OUTER END AND 3.0" SAHE CYLINDER	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1			
32	VRC25354	O-RING, COVER, SUCTION VALVE 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
33	VRC25160	RETAINER, VALVE, SUCTION, 3.0" SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCT, VALVE SEAT, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
37	VRC25180	RETAINER, VALVE, DISCHARGE, 3.0" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0"-3.5" SAHE CYLINDER, MEDIUM *	1	1		1
40	VRC26123A	VALVE, DISCHARGE, 3.0" MEDIUM AND 3.5" LIGHT SAHE CYL. *	1	1		1
41	VRC24310	PISTON, 3.0" SAHE × 4.5"-5.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24301	RING, 3.0" PISTON	4		4	4
43	VRC24302	BAND, RIDER, 3.0" PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.7 4.5 × 3.5-inch Steeple Cylinder Parts

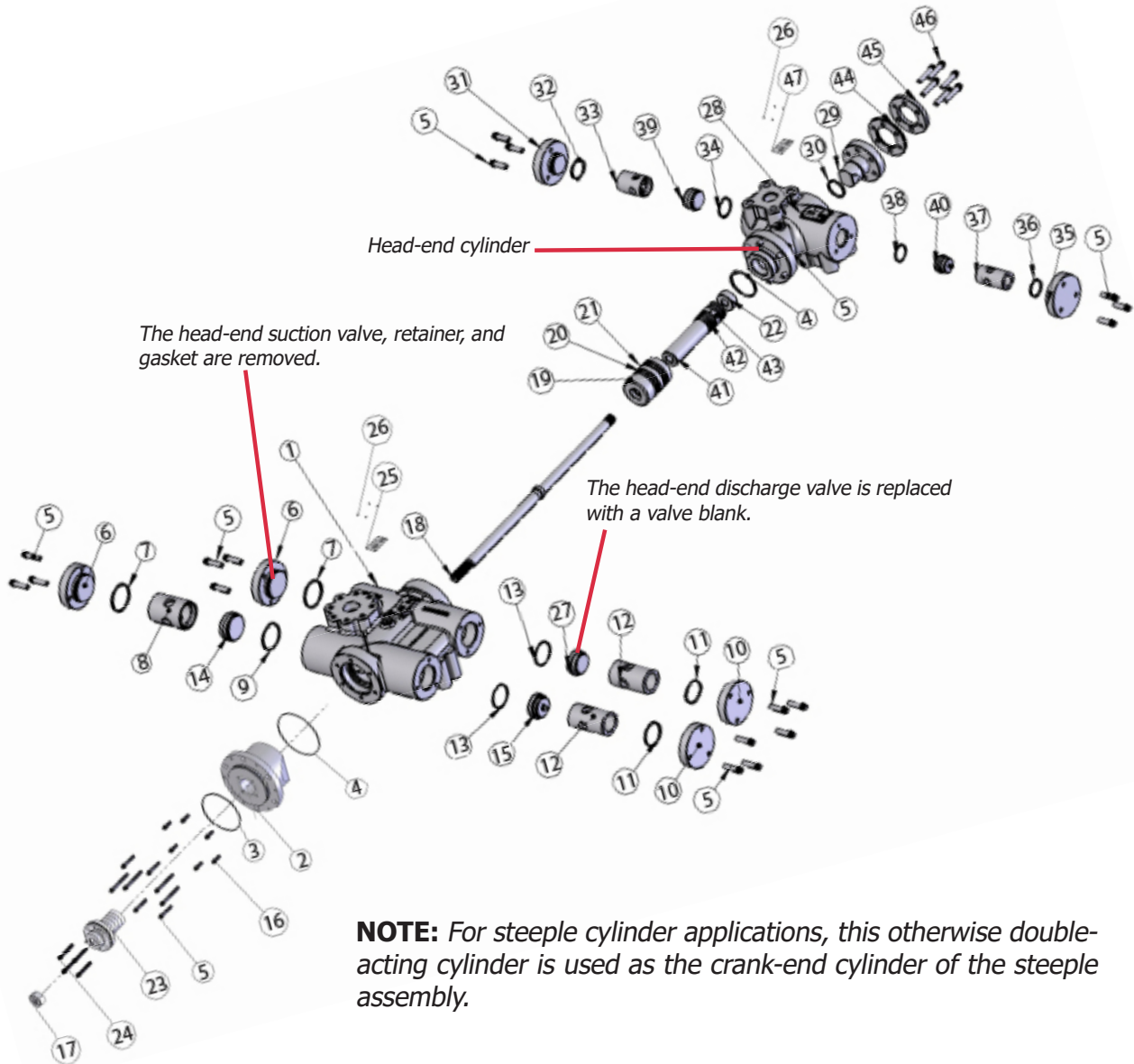


NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

4.5 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25135A	CYLINDER, STEEPLE, 3.5" SAHE × 4.5" SACE ASSEMBLY				
1	VRS25450	CYLINDER, 4.5" DA	1			
2	VRS25451	HEAD, CRANK END, 4.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1	1	1
4	VRC25452	O-RING, HEAD, CRANK AND OUTER END, 4.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER	2			
7	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25456	RETAINER, VALVE, SUCTION 4.5" DA CYLINDER	1			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	1	1	1	1

4.5 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRS25503	COVER, VALVE, DISCHARGE 4.5"-5.0" CYLINDER	2			
11	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25458	RETAINER, VALVE, DISCHARGE, 4.5" DA CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
16	VRC23107	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24113	ROD, PISTON, 3.0"-3.5" SAHE × 4.5"-5.0" SACE	1			1
19	VRC24459	PISTON, 4.5" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24451	RING, 4.5" PISTON	4		4	4
21	VRC24452	BAND, RIDER, 4.5" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26599	BLANK, VALVE, DISCHARGE, 4.5"-5.0" SACE CYLINDER	1			
28	VRC25135	CYLINDER, STEEPLE, 3.5" SAHE × 4.5" SACE	1			
29	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
30	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	2			
32	VRC25354	O-RING, COVER, SUCTION VALVE 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
33	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA AND 3.5" SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCT, VALVE SEAT, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1	1	1	1
37	VRC25183	RETAINER, VALVE, DISCHARGE, 3.5" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0-3.5" SAHE CYLINDER, MEDIUM *	1	1		1
40	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY AND 3.5" MEDIUM SAHE CYL. *	1	1		1
41	VRC24315	PISTON, 3.5" SAHE × 4.5"-5.0" SACE STEEPLE CYLINDER, AL	1	1		1
42	VRC24351	RING, 3.5" PISTON	4		4	4
43	VRC24352	BAND, RIDER, 3.5"PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** A heavier jam nut may be used if required for balancing. See section 4.19.						
*** Packing case ring kits are available. See section 4.16.						

5.8 5.0 × 2.5-inch Steeple Cylinder Parts



NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

5.0 × 2.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25125A	CYLINDER, STEEPLE, 2.5" SAHE × 5.0" SACE ASSEMBLY				
1	VRS25500	CYLINDER, 5.0" DA	1			
2	VRS25501	HEAD, CRANK END, 5.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25502	O-RING, HEAD, CRANK AND OUTER END, 5.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER	2			
7	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25506	RETAINER, VALVE, SUCTION 5.0" CYLINDER	1			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	1	1	1	1

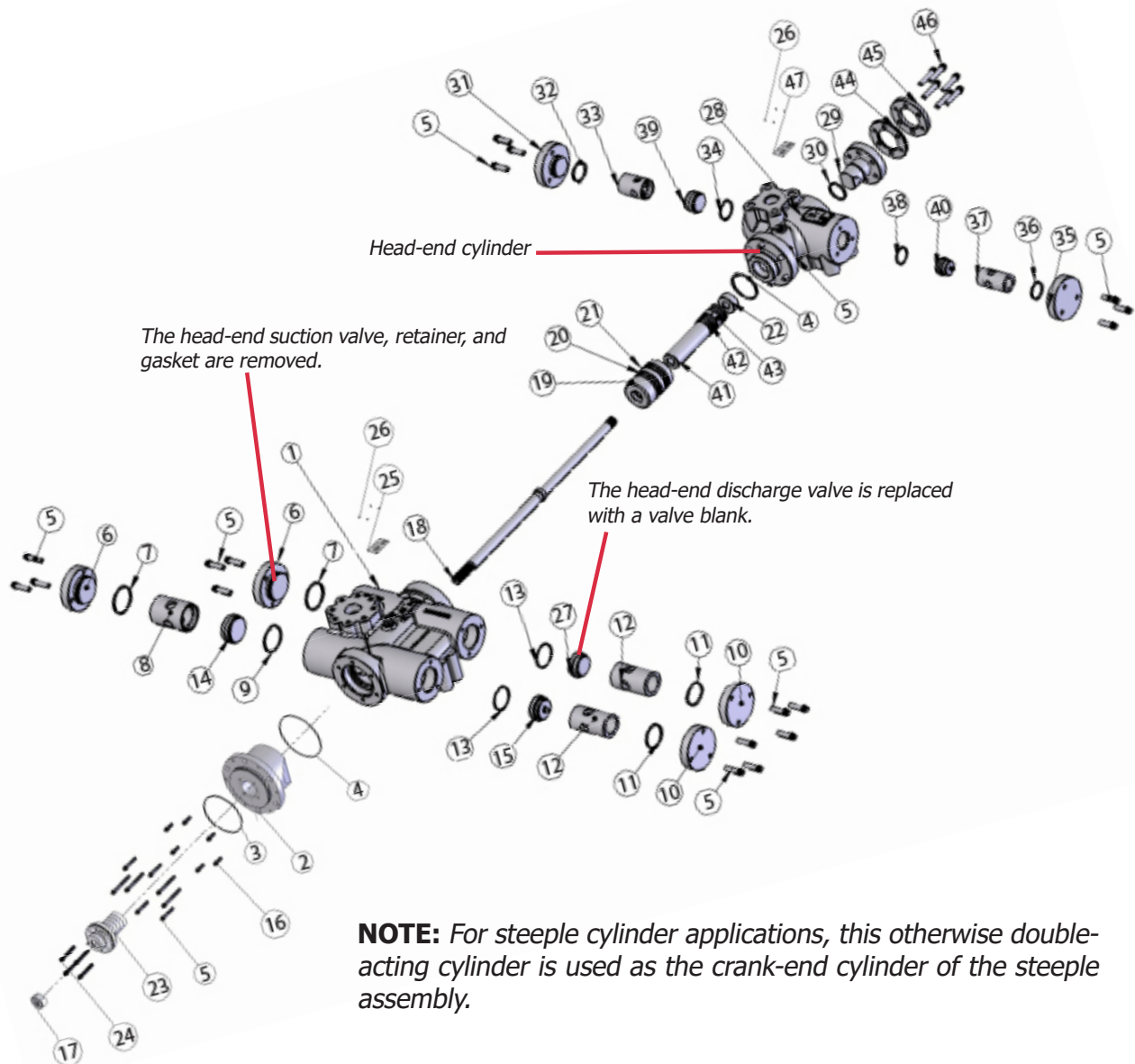
5.0 × 2.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRS25503	COVER, VALVE, DISCHARGE 4.5"-5.0" CYLINDER	2			
11	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25508	RETAINER, VALVE, DISCHARGE, 5.0" DA CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
16	VRC23107	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24111	ROD, PISTON, 2.5" SAHE × 4.5"-5.0" SACE	1			1
19A	VRC24509	PISTON, 5.0" SACE STEEPLE CYLINDER, AL	1			1
19B	VRC24508	PISTON, 5.0" SACE STEEPLE CYL., CI (MAY BE USED IF REQ. FOR BALANCING)	1			1
20	VRC24501	RING, 5.0" PISTON	4		4	4
21	VRC24502	BAND, RIDER, 5.0" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26599	BLANK, VALVE, DISCHARGE, 4.5"-5.0" SACE CYLINDER	1			
28	VRC25125	CYLINDER, STEEPLE, 2.5" SAHE × 5.0" SACE	1			
29	VRC27125	HEAD, 2.5" SAHE CYLINDER	1			
30	VRC25252	O-RING, HEAD, CRANK OUTER-END, 2.5" SAHE CYLINDER	1	1	1	1
31	VRC25253	COVER, VALVE, SUCTION, 2.25"-3.0" CYLINDER	1			
32	VRC25254	O-RING, COVER, SUCTION VALVE 2.25"-3.0" CYLINDER	1	1	1	1
33	VRC25161	RETAINER, VALVE, SUCTION, 2.5" SAHE CYLINDER	1			
34	VRC25255	GASKET, SUCT, VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
35	VRC25303	COVER, VALVE, DISCHARGE, 2.25"-3.0" CYLINDER	1			
36	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25"-3.0" CYLINDER	1	1	1	1
37	VRC25181	RETAINER, VALVE, DISCHARGE, 2.5" SAHE CYLINDER	1			
38	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25"-3.0" CYLINDER	1	1	1	1
39	VRC26015A	VALVE, SUCTION, 2.25" AND 2.5" SAHE CYLINDER, MEDIUM *	1	1		1
40	VRC26025A	VALVE, DISCHARGE, 2.25" AND 2.5" SAHE CYLINDER MEDIUM *	1	1		1
41	VRC24215	PISTON, 2.5" SAHE × 4.5"-5.0" SACE STEEPLE CYLINDER AL	1			1
42	VRC24251	RING, 2.5" PISTON	4		4	4
43	VRC24252	BAND, RIDER, 2.5" PISTON	1		1	1
44	VRC27126	SPACER, 2.25"-2.5" SAHE HEAD, 1/4"	1			
45	VRC27127	SPACER, 2.25"-2.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.9 5.0 × 3.0-inch Steeple Cylinder Parts



NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

5.0 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25132A	CYLINDER, STEEPLE, 3.0" SAHE × 5.0" SACE ASSEMBLY				
1	VRS25500	CYLINDER, 5.0" DA	1			
2	VRS25501	HEAD, CRANK END, 5.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25502	O-RING, HEAD, CRANK AND OUTER END, 5.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER	2			
7	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25506	RETAINER, VALVE, SUCTION 5.0" CYLINDER	1			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	1	1	1	1

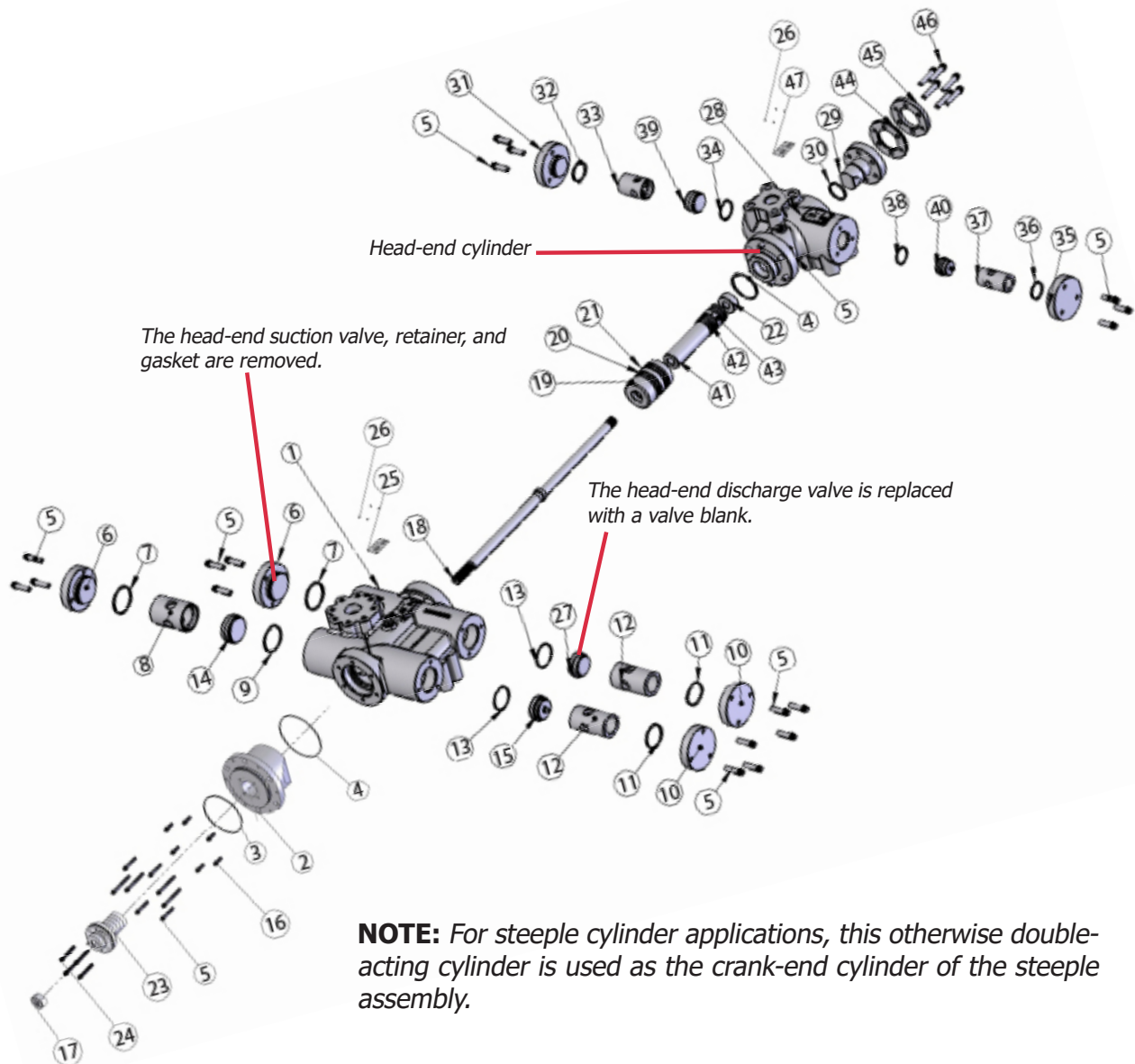
5.0 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRS25503	COVER, VALVE, DISCHARGE 4.5"-5.0" CYLINDER	2			
11	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25508	RETAINER, VALVE, DISCHARGE, 5.0" CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
16	VRC23107	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24113	ROD, PISTON, 3.0"-3.5" SAHE × 4.5"-5.0" SACE	1			1
19A	VRC24509	PISTON, 5.0" SACE STEEPLE CYLINDER, AL	1			1
19B	VRC24508	PISTON, 5.0" SACE STEEPLE CYL., CI (MAY BE USED IF REQ. FOR BALANCING)	1			1
20	VRC24501	RING, 5.0" PISTON	4		4	4
21	VRC24502	BAND, RIDER, 5.0" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26599	BLANK, VALVE, DISCHARGE, 4.5"-5.0" SACE CYLINDER	1			
28	VRC25132	CYLINDER, STEEPLE, 3.0" SACE × 5.0" SACE	1			
29	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
30	VRC25302	O-RING, HEAD, CRANK OUTER-END, 3.0" SAHE CYLINDER	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1			
32	VRC25354	O-RING, COVER, SUCTION VALVE, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
33	VRC25160	RETAINER, VALVE, SUCTION, 3.0" SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCT, VALVE SEAT, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
37	VRC25180	RETAINER, VALVE, DISCHARGE, 3.0" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0"-3.5" SAHE CYLINDER, MEDIUM *	1	1		1
40	VRC26123A	VALVE, DISCHARGE, 3.0" MED. AND 3.5" LIGHT SAHE CYLINDER *	1	1		1
41	VRC24310	PISTON, 3.0" SAHE × 4.5"-5.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24301	RING, 3.0" PISTON	4		4	4
43	VRC24302	BAND, RIDER, 3.0" PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.10 5.0 × 3.5-inch Steeple Cylinder Parts



5.0 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25136A	CYLINDER, STEEPLE, 3.5" SAHE × 5.0" SACE ASSEMBLY				
1	VRS25500	CYLINDER, 5.0" DA	1			
2	VRS25501	HEAD, CRANK END, 5.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25502	O-RING, HEAD, CRANK AND OUTER END, 5.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER	2			
7	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYLINDER	2	2	2	2
8	VRS25506	RETAINER, VALVE, SUCTION 5.0" CYLINDER	1			
9	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYLINDER	1	1	1	1

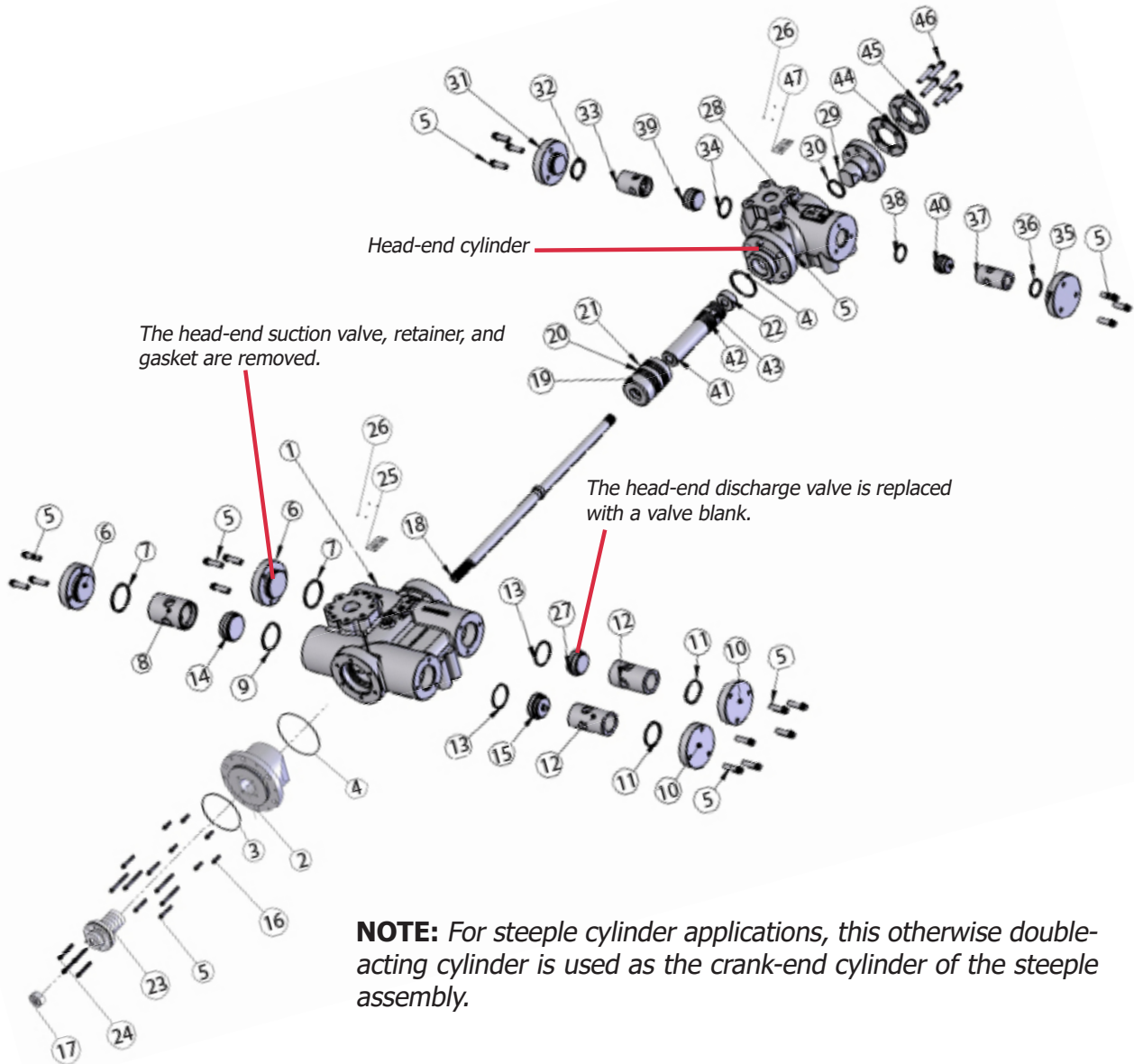
5.0 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRS25503	COVER, VALVE, DISCHARGE 4.5"-5.0" CYL	2			
11	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5"-5.0" CYLINDER	2	2	2	2
12	VRS25508	RETAINER, VALVE, DISCHARGE, 5.0" CYLINDER	2			
13	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYLINDER	2	2	2	2
14	VRS26515A	VALVE, SUCTION, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
15	VRS26525A	VALVE, DISCHARGE, 4.5"-5.0" CYLINDER MEDIUM *	1	1		1
16	VRC23107	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24113	ROD, PISTON, 3.0"-3.5" SAHE × 4.5"-5.0" SACE	1			1
19A	VRC24509	PISTON, 5.0" SACE STEEPLE CYLINDER, AL	1			1
19B	VRC24508	PISTON, 5.0" SACE STEEPLE CYL., CI (MAY BE USED IF REQ. FOR BALANCING)	1			1
20	VRC24501	RING, 5.0" PISTON	4		4	4
21	VRC24502	BAND, RIDER, 5.0" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26599	BLANK, VALVE, DISCHARGE, 4.5"-5.0" SACE CYLINDER	1			
28	VRC25136	CYLINDER, STEEPLE, 3.5" SAHE × 5.0" SACE	1			
29	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
30	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1			
32	VRC25354	O-RING, COVER, SUCTION VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
33	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA AND 3.5" SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
37	VRC25183	RETAINER, VALVE, DISCHARGE, 3.5" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0"-3.5" SAHE CYLINDER, MEDIUM *	1	1		1
40	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY AND 3.5" MEDIUM SAHE CYL.*	1	1		1
41	VRC24315	PISTON, 3.5" SAHE × 4.5"-5.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24351	RING, 3.5" PISTON	4		4	4
43	VRC24352	BAND, RIDER, 3.5" PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.11 5.5 × 3.0-inch Steeple Cylinder Parts

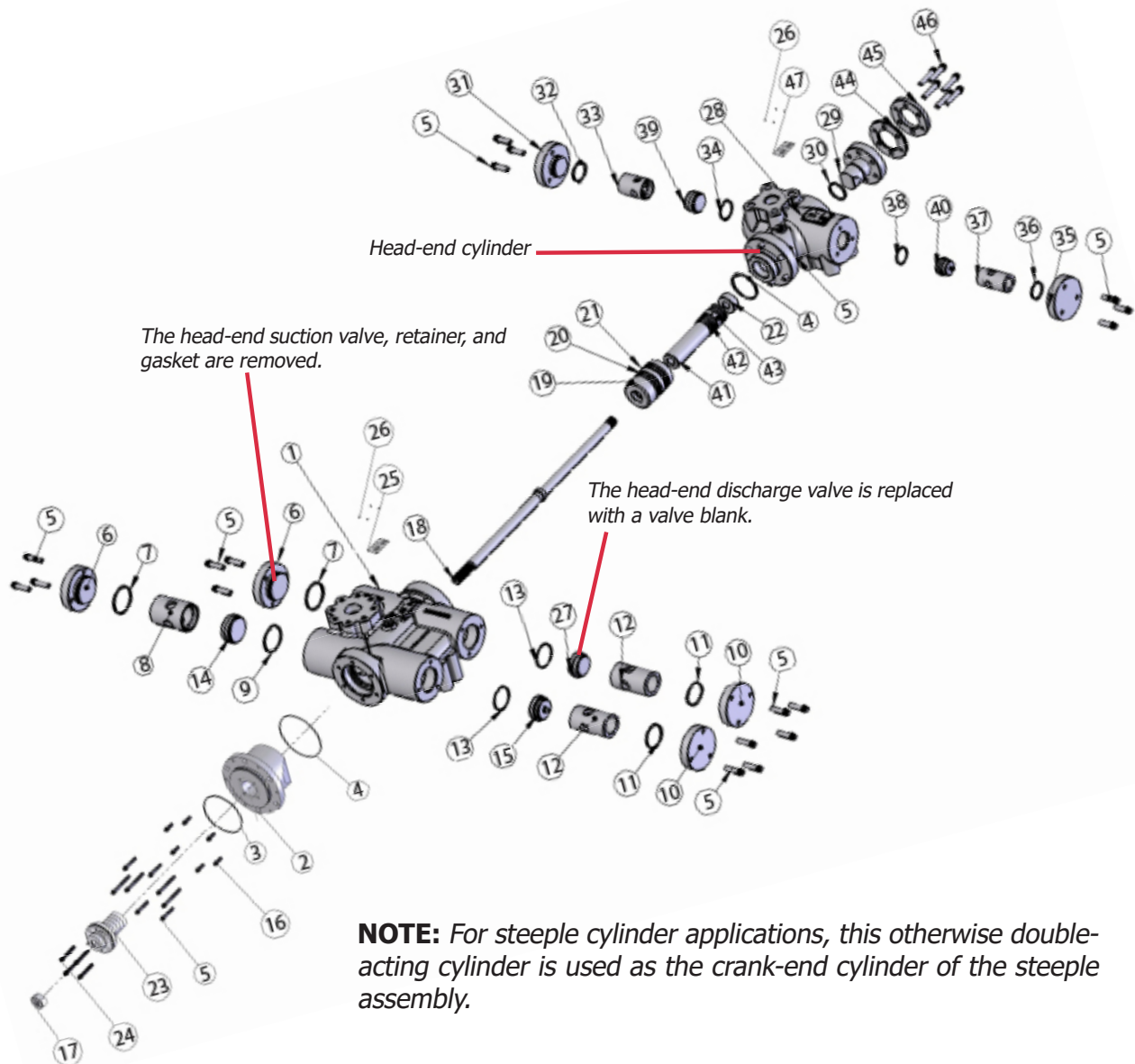


NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

5.5 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25133A	CYLINDER, STEEPLE, 3.0" SAHE × 5.5" SACE ASSEMBLY				
1	VRS25550	CYLINDER, 5.5" DA	1			
2	VRS25551	HEAD, CRANK END, 5.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25552	O-RING, HEAD, CRANK AND OUTER END, 5.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRC25553	COVER, VALVE, SUCTION, 5.5"-6.0" CYLINDER	2			
7	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
8	VRS25556	RETAINER, VALVE, SUCTION, 5.5" CYLINDER	1			
9	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5"-6.0" CYLINDER	1	1	1	1

5.5 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRC25603	COVER, VALVE, DISCHARGE, 5.5"-6.0" CYLINDER	2			
11	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
12	VRS25558	RETAINER, VALVE, DISCHARGE, 5.5" CYLINDER	2			
13	VRC25605	GASKET, DISCHARGE, VALVE SEAT, 5.5"-6.0" CYLINDER	2	2	2	2
14	VRS26615A	VALVE, SUCTION, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
15	VRS26625A	VALVE, DISCHARGE, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
16	VRC25077	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24114	ROD, PISTON, 3.0"-3.5" SAHE × 5.5"-6.0" SACE	1			1
19	VRC24559	PISTON, 5.5" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24551	RING, 5.5" PISTON	2		2	2
21	VRC24552	BAND, RIDER, 5.5" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26699	BLANK, VALVE, DISCHARGE, 5.5"-6.0" SACE CYLINDER	1			
28	VRC25133	CYLINDER, STEEPLE, 3.0" SAHE × 5.5" SACE	1			
29	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
30	VRC25302	O-RING, HEAD, CRANK OUTER-END AND SAHE 3.0" CYLINDERS	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 2.25"-3.0" CYLINDER AND 3.0"-3.5" SAHE	1			
32	VRC25354	O-RING, COVER, SUCTION VALVE 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
33	VRC25160	RETAINER, VALVE, SUCTION 3.0" SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
37	VRC25180	RETAINER, VALVE, DISCHARGE, 3.0" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" DA, 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0" AND 3.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26123A	VALVE, DISCHARGE, 3.0" MEDIUM AND 3.5" LIGHT SAHE CYL. *	1	1		1
41	VRC24311	PISTON, 3.0" SAHE × 5.5"-6.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24301	RING, 3.0" PISTON	4		4	4
43	VRC24302	BAND, RIDER, 3.0" PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** A heavier jam nut may be used if required for balancing. See section 4.19.						
*** Packing case ring kits are available. See section 4.16.						

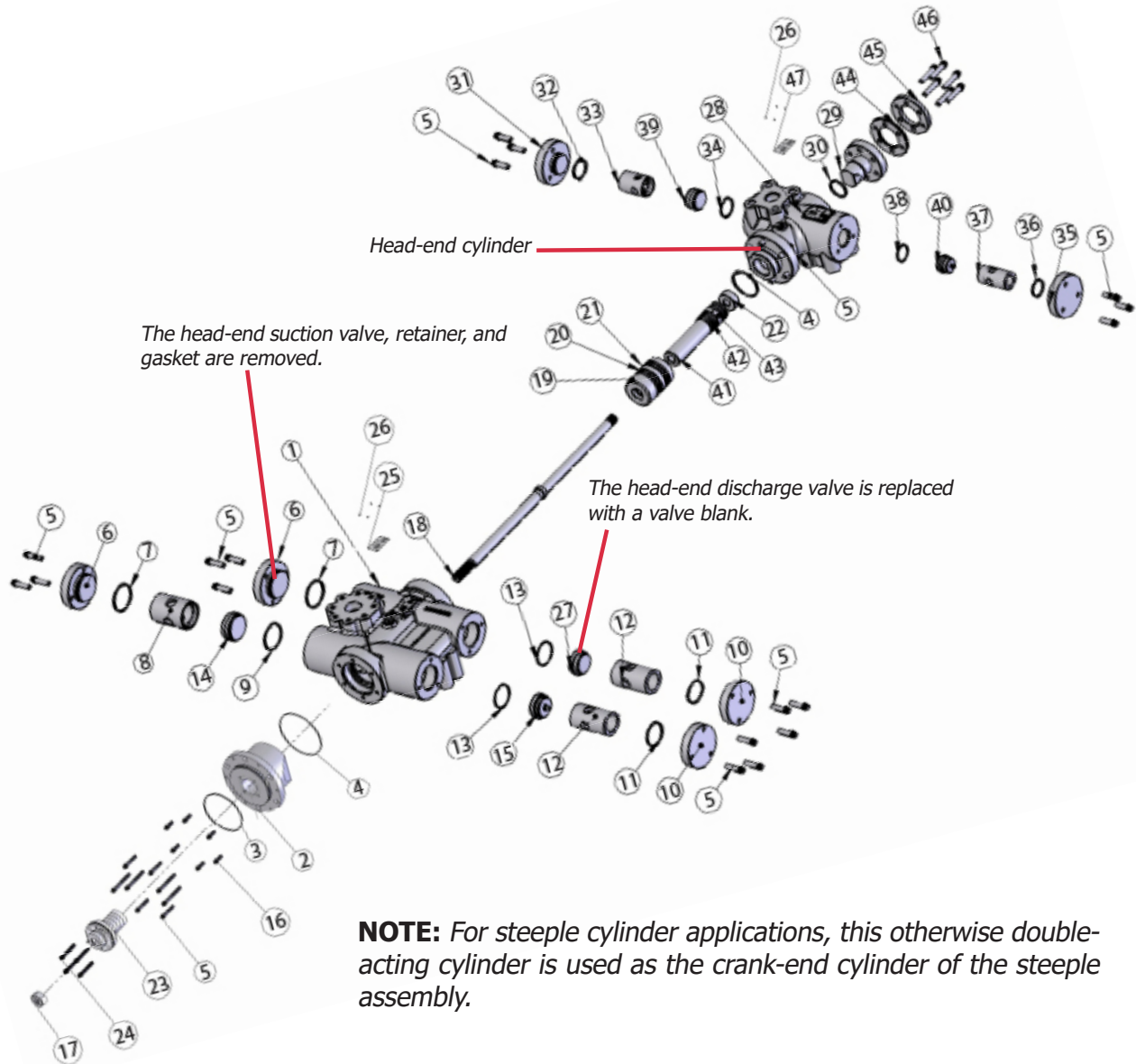
5.12 5.5 × 3.5-inch Steeple Cylinder Parts



5.5 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25137A	CYLINDER, STEEPLE, 3.5" SAHE × 5.5" SACE ASSEMBLY				
1	VRS25550	CYLINDER, 5.5" DA	1			
2	VRS25551	HEAD, CRANK END, 5.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25552	O-RING, HEAD, CRANK AND OUTER END, 5.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRC25553	COVER, VALVE, SUCTION, 5.5"-6.0" CYLINDER	2			
7	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
8	VRS25556	RETAINER, VALVE, SUCTION, 5.5" CYLINDER	1			
9	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5"-6.0" CYL	1	1	1	1

5.5 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
10	VRC25603	COVER, VALVE, DISCHARGE, 5.5"-6.0" CYLINDER	2			
11	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
12	VRS25558	RETAINER, VALVE, DISCHARGE, 5.5" CYLINDER	2			
13	VRC25605	GASKET, DISCHARGE, VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
14	VRS26615A	VALVE, SUCTION, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
15	VRS26625A	VALVE, DISCHARGE, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
16	VRC25077	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24114	ROD, PISTON, 3.0"-3.5" SAHE × 5.5"-6.0" SACE	1			1
19	VRC24559	PISTON, 5.5" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24551	RING, 5.5" PISTON	2		2	2
21	VRC24552	BAND, RIDER, 5.5" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26699	BLANK, VALVE, DISCHARGE, 5.5"-6.0" SACE CYLINDER	1			
28	VRC25137	CYLINDER, STEEPLE, 3.5" SAHE × 5.5" SACE	1			
29	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
30	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" CYLINDER	1			
32	VRC25354	O-RING, COVER, SUCTION VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
33	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA AND 3.5" SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
37	VRC25183	RETAINER, VALVE, DISCHARGE, 3.5" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0"-3.5" SAHE CYLINDER, MEDIUM *	1	1		1
40	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY. AND 3.5" MEDIUM SAHE CYL. *	1	1		1
41	VRC24316	PISTON, 3.5" SAHE × 5.5"-6.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24351	RING, 3.5" PISTON	4		4	4
43	VRC24352	BAND, RIDER, 3.5" PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** A heavier jam nut may be used if required for balancing. See section 4.19.						
*** Packing case ring kits are available. See section 4.16.						

5.13 6.0 × 3.0-inch Steeple Cylinder Parts

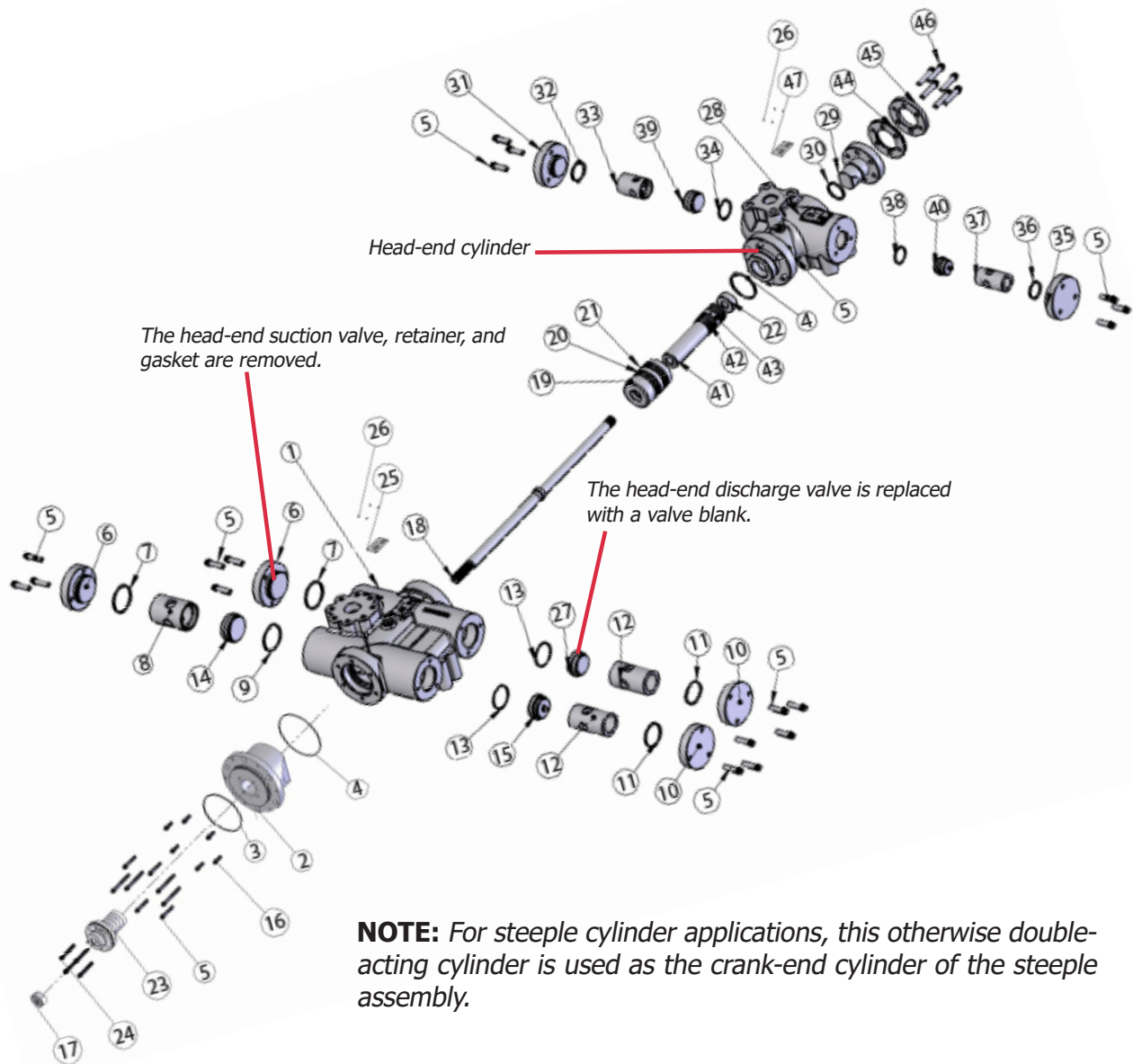


NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

6.0 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25134A	CYLINDER, STEEPLE, 3.0" SAHE × 6.0" SACE ASSEMBLY				
1	VRS25600	CYLINDER, 6.0" DA	1			
2	VRS25601	HEAD, CRANK END, 6.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25602	O-RING, HEAD, CRANK AND OUTER END, 6.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRC25553	COVER, VALVE, SUCTION, 5.5"-6.0" CYLINDER	2			
7	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
8	VRS25606	RETAINER, VALVE, SUCTION, 6.0" CYLINDER	1			
9	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5"-6.0" CYLINDER	1	1	1	1

6.0 × 3.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRC25603	COVER, VALVE, DISCHARGE, 5.5"-6.0" CYLINDER	2			
11	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
12	VRS25608	RETAINER, VALVE, DISCHARGE, 6.0" CYLINDER	2			
13	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5"-6.0" CYLINDER	2	2	2	2
14	VRS26615A	VALVE, SUCTION, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
15	VRS26625A	VALVE, DISCHARGE, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
16	VRC25077	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24114	ROD, PISTON, 3.0"-3.5" SAHE × 5.5"-6.0" SACE	1			1
19	VRC24609	PISTON, 6.0" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24601	RING, 6.0" PISTON	2		2	2
21	VRC24602	BAND, RIDER, 6.0" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26699	BLANK, VALVE, DISCHARGE 5.5"-6.0" SACE CYLINDER	1			
28	VRC25134	CYLINDER, STEEPLE, 3.0" SAHE × 6.0" SACE	1			
29	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
30	VRC25302	O-RING, HEAD, CRANK OUTER-END, 3.0"SAHE CYLINDERS	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1			
32	VRC25354	O-RING, COVER, SUCTION VALVE 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
33	VRC25160	RETAINER, VALVE, SUCTION, 3.0" SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE, VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
37	VRC25180	RETAINER, VALVE DISCHARGE, 3.0" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0" AND 3.5" SAHE CYLINDER, MEDIUM *	1	1		1
40	VRC26123A	VALVE, DISCHARGE, 3.0" MEDIUM AND 3.5" LIGHT SAHE CYL. *	1	1		1
41	VRC24311	PISTON, 3.0" SAHE × 5.5"-6.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24301	RING, 3.0" PISTON	4		4	4
43	VRC24302	BAND, RIDER, 3.0" PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** A heavier jam nut may be used if required for balancing. See section 4.19.						
*** Packing case ring kits are available. See section 4.16.						

5.14 6.0 × 3.5-inch Steeple Cylinder Parts



6.0 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25138A	CYLINDER, STEEPLE, 3.5" SAHE × 6.0" SACE ASSEMBLY				
1	VRS25600	CYLINDER, 6.0" DA	1			
2	VRS25601	HEAD, CRANK END, 6.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25602	O-RING, HEAD, CRANK AND OUTER END, 6.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRC25553	COVER, VALVE, SUCTION, 5.5"-6.0" CYLINDER	2			
7	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
8	VRS25606	RETAINER, VALVE, SUCTION, 5.5"-6.0" CYLINDER	1			
9	VRC25555	GASKET, SUCTION, VALVE, SEAT, 5.5"-6.0" CYLINDER	1	1	1	1

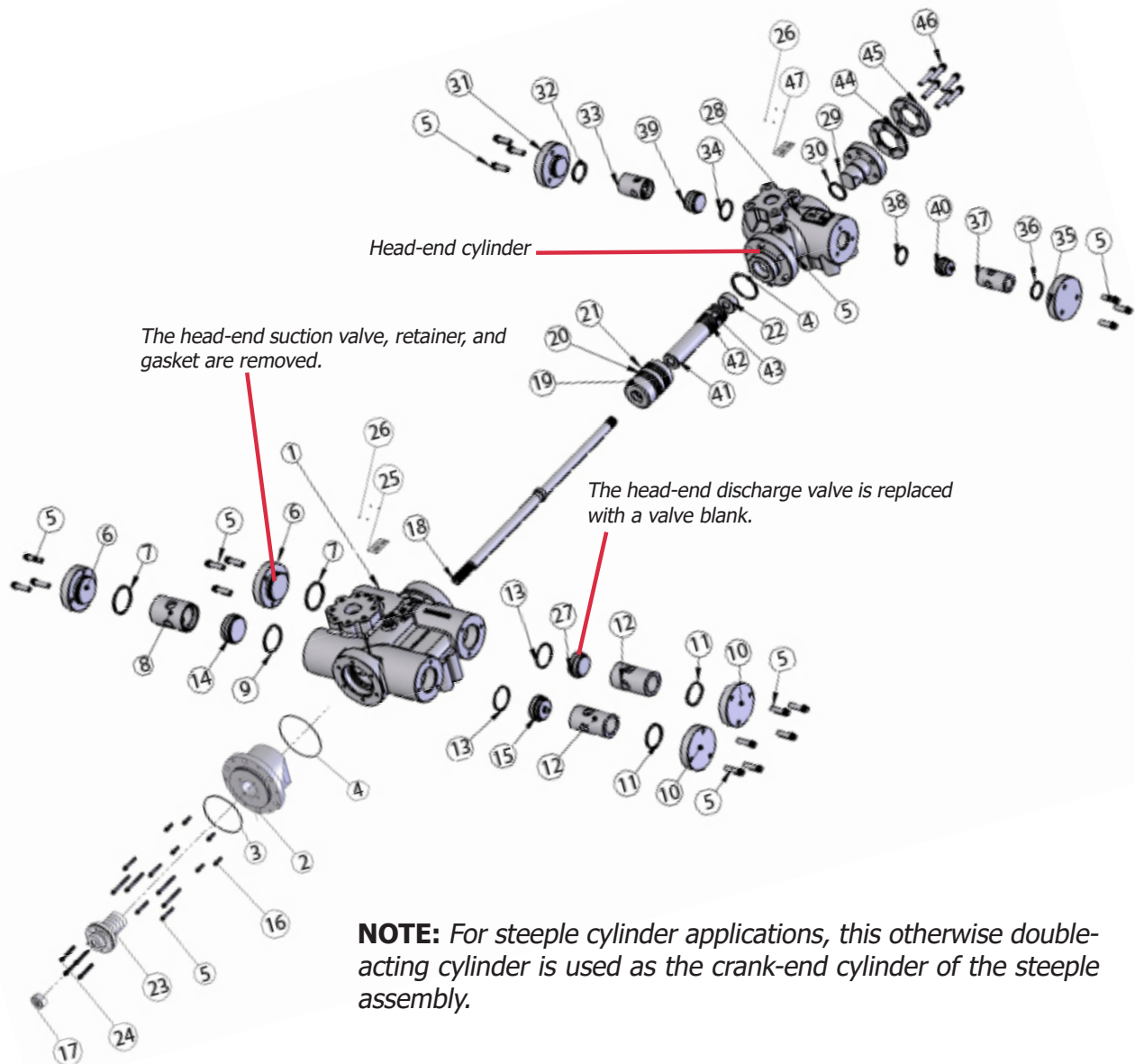
6.0 × 3.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
10	VRC25603	COVER, VALVE, DISCHARGE, 5.5"-6.0" CYLINDER	2			
11	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5"-6.0" CYLINDER	2	2	2	2
12	VRS25608	RETAINER, VALVE, DISCHARGE, 6.0" CYLINDER	2			
13	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5"-6.0" CYLINDER	2	2	2	2
14	VRS26615A	VALVE, SUCTION, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
15	VRS26625A	VALVE, DISCHARGE, 5.5"-6.0" CYLINDER MEDIUM *	1	1		1
16	VRC25077	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24114	ROD, PISTON, 3.0"-3.5" SAHE × 5.5"-6.0" SACE	1			1
19	VRC24609	PISTON, 6.0" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24601	RING, 6.0" PISTON	2		2	2
21	VRC24602	BAND, RIDER, 6.0" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26699	BLANK, VALVE, DISCHARGE 5.5"-6.0" SACE CYLINDER	1			
28	VRC25138	CYLINDER, STEEPLE, 3.5" SAHE × 6.0" SACE	1			
29	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
30	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1	1	1	1
31	VRC25353	COVER, VALVE, SUCTION, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1			
32	VRC25354	O-RING, COVER, SUCTION VALVE 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
33	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA AND 3.5 SAHE CYLINDER	1			
34	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
35	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER, 3.0"-3.5" SAHE	1			
36	VRC25404	O-RING, COVER, DISCHARGE, VALVE, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
37	VRC25183	RETAINER, VALVE DISCHARGE, 3.5" SAHE CYLINDER	1			
38	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5"-4.0" CYL., 3.0"-3.5" SAHE	1	1	1	1
39	VRC26115A	VALVE, SUCTION, 3.0" AND 3.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY AND 3.5" MEDIUM SAHE CYL. *	1	1		1
41	VRC24316	PISTON, 3.5" SAHE × 5.5"-6.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24351	RING, 3.5" PISTON	4		4	4
43	VRC24352	BAND, RIDER, 3.5" PISTON	1		1	1
44	VRC27136	SPACER, 3.0"-3.5" SAHE HEAD, 1/4"	1			
45	VRC27137	SPACER, 3.0"-3.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.15 6.5 × 4.0-inch Steeple Cylinder Parts

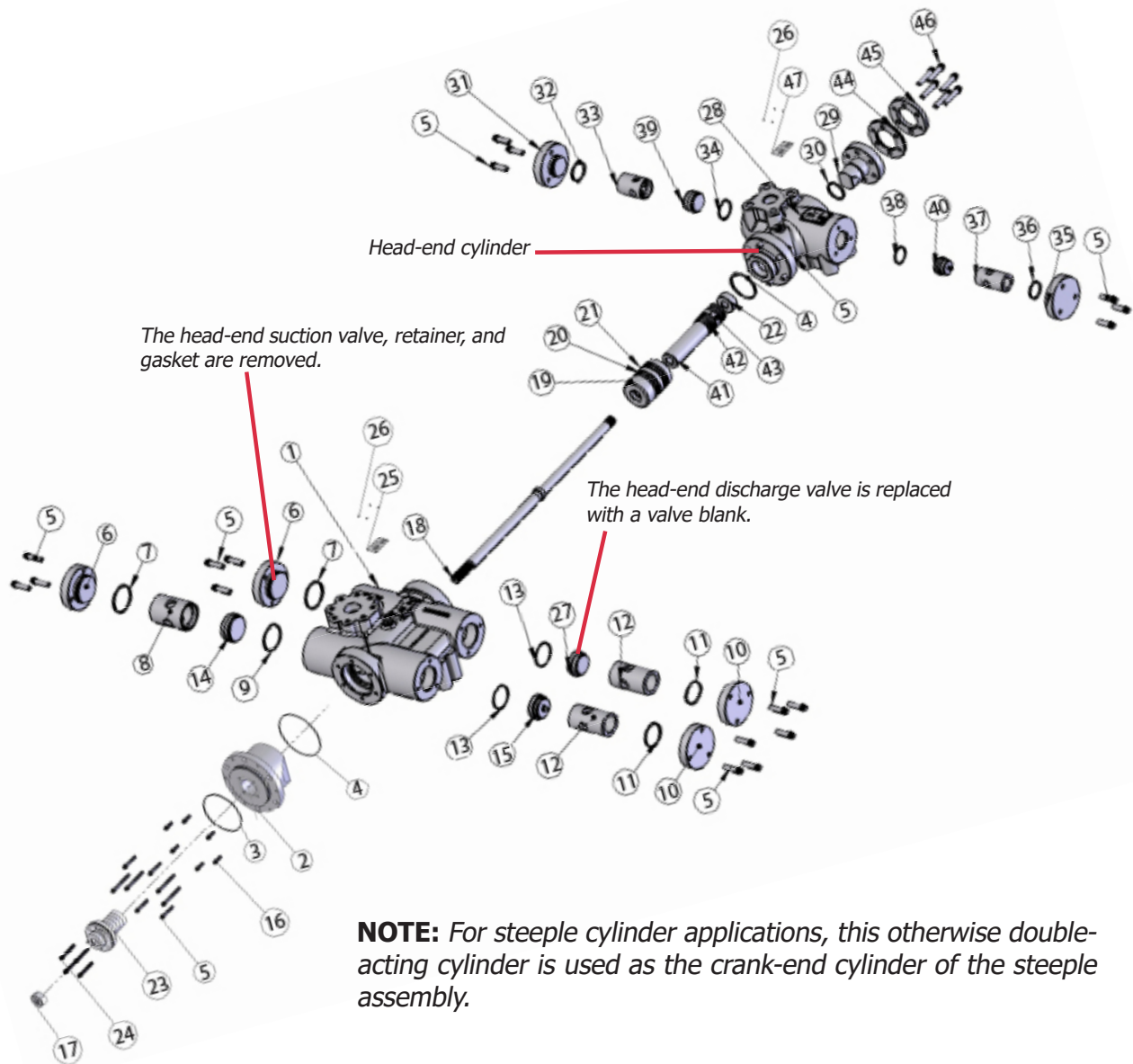


NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

6.5 × 4.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25141A	CYLINDER, STEEPLE, 4.0" SAHE × 6.5" SACE ASSEMBLY				
1	VRS25650	CYLINDER, 6.5" DA	1			
2	VRS25651	HEAD, CRANK END, 6.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25652	O-RING, HEAD, CRANK AND OUTER END, 6.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2	2	2	2
8	VRS25656	RETAINER, VALVE, SUCTION, 6.5" CYLINDER	1			
9	VRS25655	GASKET, SUCTION VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	1	1	1	1

6.5 × 4.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
11	VRS25704	O-RING, COVER, DISCHARGE 6.5" 6.5", 7.0", 9.5", 10.0" CYLINDER	2	2	2	2
12	VRS25658	RETAINER, VALVE, DISCHARGE, 6.5" CYLINDER	2			
13	VRS25705	GASKET, DISCHARGE, VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	2	2	2	2
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER MEDIUM *	1	1		1
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER MEDIUM *	1	1		1
16	VRC25067	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24115	ROD, PISTON, 4.0"-4.5" SAHE × 6.5"-7.0" SACE	1			1
19	VRC24659	PISTON, 6.5" SACE STEEPLE CYLINDER, AL	1			1
20	VRC25651	RING, 6.5" PISTON	2		2	2
21	VRC25652	BAND, RIDER, 6.5" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26799	BLANK, VALVE, DISCHARGE, 6.5"-7.0" SACE VRS CYLINDER	1			
28	VRC25141	CYLINDER, STEEPLE, 4.0" SAHE × 6.5" SACE	1			
29	VRC27141	HEAD, 4.0" SAHE CYLINDER	1			
30	VRC25402	O-RING, HEAD, CRANK OUTER-END, 4.0" CYLINDER	1	1	1	1
31	VRS25453	COVER, VALVE, SUCTION 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
32	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
33	VRC25164	RETAINER, VALVE, SUCTION, 4.0" CYLINDER	1			
34	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
35	VRS25503	COVER, VALVE, DISCHARGE, 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
36	VRC25504	O-RING, COVER DISCHARGE VALVE, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
37	VRC25184	RETAINER, VALVE, DISCHARGE, 4.0"SAHE CYLINDER	1			
38	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
39	VRC26215A	VALVE, SUCTION, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26225A	VALVE, DISCHARGE, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
41	VRC24410	PISTON, 4.0" SAHE × 6.5"-7.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24401	RING, 4.0" PISTON	4		4	4
43	VRC24402	BAND, RIDER, 4.0" PISTON	1		1	1
44	VRC27146	SPACER, 4.0"-4.5" SAHE HEAD, 1/4"	1			
45	VRC27147	SPACER, 4.0"-4.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** A heavier jam nut may be used if required for balancing. See section 4.19.						
*** Packing case ring kits are available. See section 4.16.						

5.16 6.5 × 4.5-inch Steeple Cylinder Parts

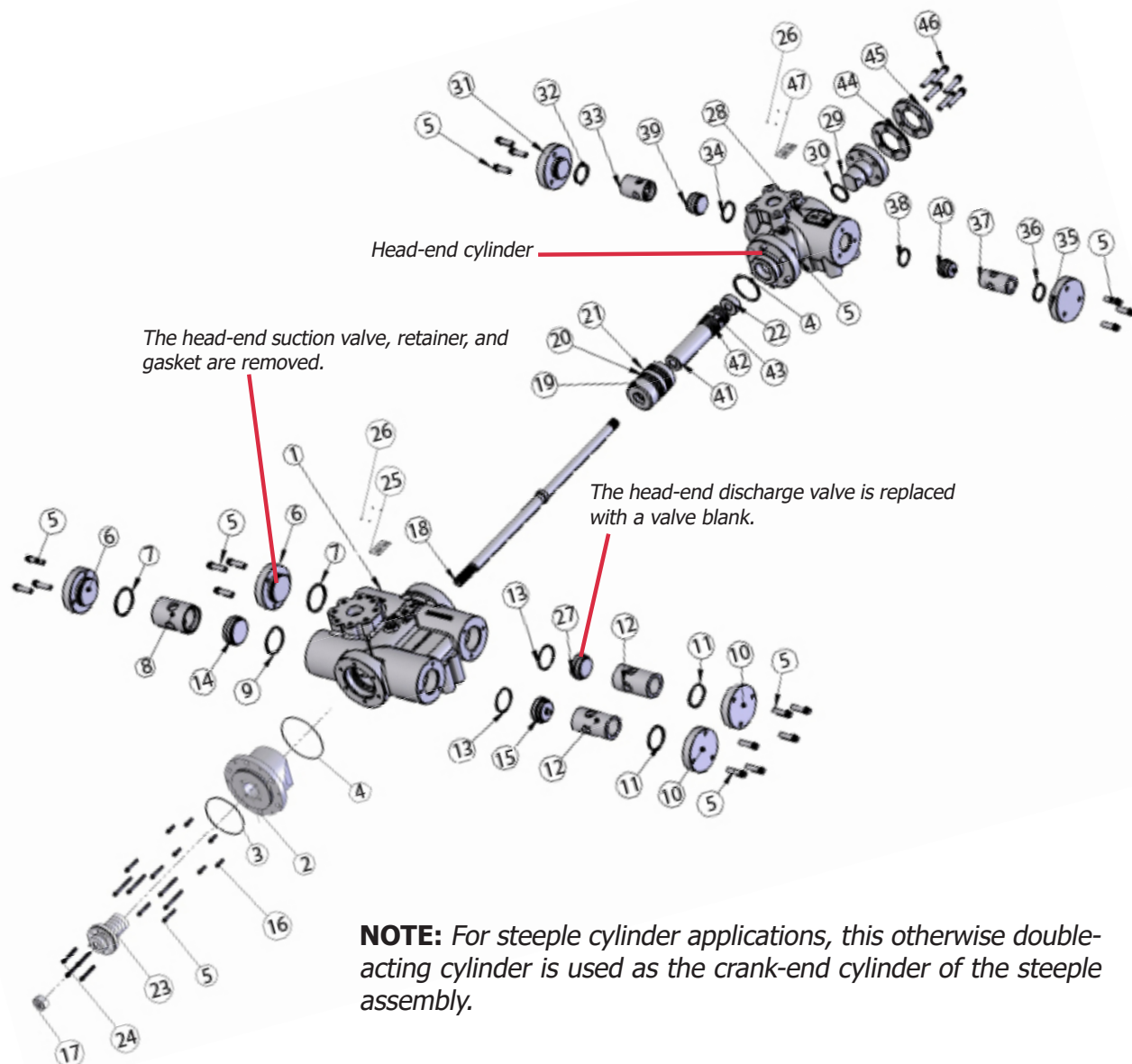


NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

6.5 × 4.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25143A	CYLINDER, STEEPLE, 4.5" SAHE × 6.5" SACE ASSEMBLY				
1	VRS25650	CYLINDER, 6.5" DA	1			
2	VRS25651	HEAD, CRANK END, 6.5" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25652	O-RING, HEAD, CRANK AND OUTER END, 6.5" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
8	VRS25656	RETAINER, VALVE, SUCTION, 6.5" CYLINDER	1			
9	VRS25655	GASKET, SUCTION VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	1	1	1	1

6.5 × 4.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
11	VRS25704	O-RING, COVER, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2	2	2	2
12	VRS25658	RETAINER, VALVE, DISCHARGE, 6.5" CYLINDER	2			
13	VRS25705	GASKET, DISCHARGE, VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	1	1		1
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	1	1		1
16	VRC25067	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24115	ROD, PISTON, 4.0"-4.5" SAHE × 6.5"-7.0" SACE	1			1
19	VRC24659	PISTON, 6.5" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24651	RING, 6.5" PISTON	2		2	2
21	VRC24652	BAND, RIDER, 6.5" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26799	BLANK, VALVE, DISCHARGE, 6.5"-7.0" SACE CYLINDER	1			
28	VRC25143	CYLINDER, STEEPLE 4.5" SAHE × 6.5" SACE	1			
29	VRC27145	HEAD, 4.5" SAHE CYLINDER	1			
30	VRC25452	O-RING, HEAD, CRANK OUTER-END, 4.5" SAHE CYLINDER	1	1	1	1
31	VRC25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
32	VRC25454	O-RING, COVER, SUCTION VALVE, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
33	VRC25165	RETAINER, VALVE, SUCTION, 4.5" SAHE CYLINDER	1			
34	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
35	VRC25503	COVER, VALVE, DISCHARGE, 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
36	VRC25504	O-RING, COVER, DISCHARGE VALVE, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
37	VRC25185	RETAINER, VALVE, DISCHARGE, 4.5" SAHE CYLINDER	1			
38	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
39	VRC26215A	VALVE, SUCTION, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26225A	VALVE, DISCHARGE, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
41	VRC24415	PISTON, 4.5" SAHE × 6.5"-7.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24451	RING, 4.5" PISTON	4		4	4
43	VRC24452	BAND, RIDER, 4.5" PISTON	1		1	1
44	VRC27146	SPACER, 4.0"-4.5" SAHE HEAD, 1/4"	1			
45	VRC27147	SPACER, 4.0"-4.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** A heavier jam nut may be used if required for balancing. See section 4.19.						
*** Packing case ring kits are available. See section 4.16.						

5.17 7.0 × 4.0-inch Steeple Cylinder Parts



7.0 × 4.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25142A	CYLINDER, STEEPLE, 4.0" SAHE × 7.0" SACE ASSEMBLY				
1	VRS25700	CYLINDER, 7.0" DA	1			
2	VRS25701	HEAD, CRANK END, 7.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25702	O-RING, HEAD, CRANK AND OUTER END, 7.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
8	VRS25706	RETAINER, VALVE, SUCTION, 7.0" CYLINDER	1			

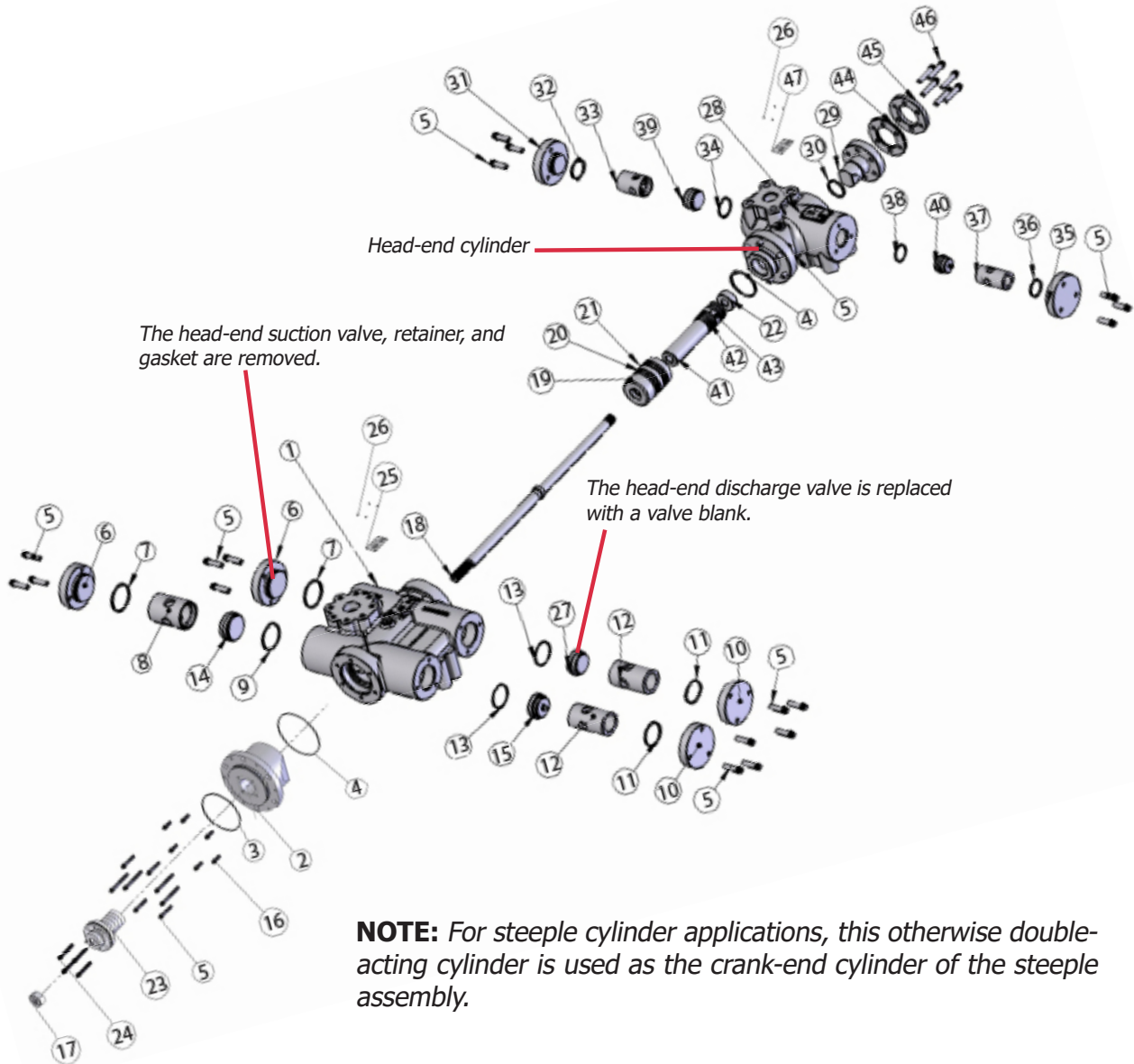
7.0 × 4.0 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6	1	2
				MOS	YR	YRS
9	VRS25655	GASKET, SUCTION, VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	1	1	1	1
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
11	VRS25704	O-RING, COVER, DISCHARGE VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
12	VRS25708	RETAINER, VALVE, DISCHARGE, 7.0" CYLINDER	2			
13	VRS25705	GASKET, DISCHARGE VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	1	1		1
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	1	1		1
16	VRC25067	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24115	ROD, PISTON, 4.0"-4.5" SAHE × 6.5"-7.0" SACE	1			1
19	VRC24709	PISTON, 7.0" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24701	RING, 7.0" PISTON	2		2	2
21	VRC24702	BAND, RIDER, 7.0" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26799	BLANK, VALVE, DISCHARGE, 6.5"-7.0" SACE CYLINDER	1			
28	VRC25142	CYLINDER, STEEPLE, 4.0" SAHE × 7.0" SACE	1			
29	VRC27141	HEAD, 4.0" SAHE CYLINDER	1			
30	VRC25402	O-RING, HEAD, CRANK OUTER-END, 4.0" SAHE CYLINDER	1	1	1	1
31	VRC25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
32	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
33	VRC25164	RETAINER, VALVE, SUCTION, 4.0" SAHE CYLINDER	1			
34	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
35	VRC25503	COVER, VALVE, DISCHARGE, 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
36	VRC25504	O-RING, COVER DISCHARGE VALVE, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
37	VRC25184	RETAINER, VALVE, DISCHARGE, 4.0" SAHE CYLINDER	1			
38	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
39	VRC26215A	VALVE, SUCTION, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26225A	VALVE, DISCHARGE, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
41	VRC24410	PISTON, 4.0" SAHE × 6.5"-7.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24401	RING, 4.0" PISTON	4		4	4
43	VRC24402	BAND, RIDER, 4.0" PISTON	1		1	1
44	VRC27146	SPACER, 4.0"-4.5" SAHE HEAD, 1/4"	1			
45	VRC27147	SPACER, 4.0"-4.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			

* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.

** A heavier jam nut may be used if required for balancing. See section 4.19.

*** Packing case ring kits are available. See section 4.16.

5.18 7.0 × 4.5-inch Steeple Cylinder Parts

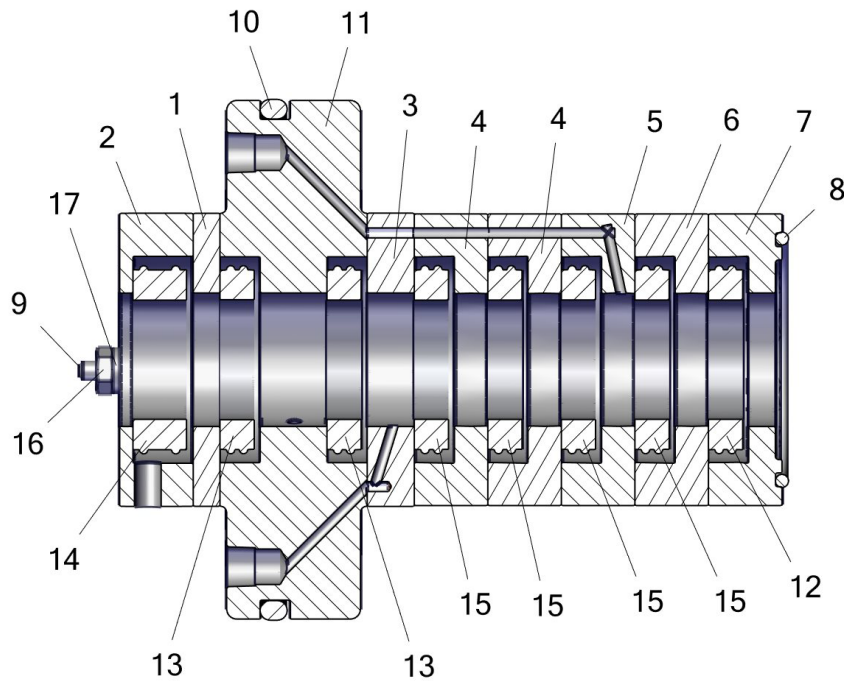


NOTE: For steeple cylinder applications, this otherwise double-acting cylinder is used as the crank-end cylinder of the steeple assembly.

7.0 × 4.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
	VRS25144A	CYLINDER, STEEPLE, 4.5" SAHE × 7.0" SACE ASSEMBLY				
1	VRS25700	CYLINDER, 7.0" DA	1			
2	VRS25701	HEAD, CRANK END, 7.0" CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25702	O-RING, HEAD, CRANK AND OUTER END, 7.0" CYLINDER	2	1	1	2
5	VRC25077	SCREW, VALVE COVER	32			
6	VRS25653	COVER, VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
7	VRS25654	O-RING, COVER, SUCTION VALVE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2	2	2	2
8	VRS25706	RETAINER, VALVE, SUCTION, 7.0" CYLINDER	1			
9	VRS25655	GASKET, SUCTION, VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYLINDER	1	1	1	1

7.0 × 4.5 STEEPLE CYLINDER				REC. SPARE PARTS		
NO.	PART NO.	DESCRIPTION	QTY.	6 MOS	1 YR	2 YRS
10	VRS25703	COVER, VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER	2			
11	VRS25704	O-RING, COVER, DISCHARGE VALVE, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
12	VRS25708	RETAINER, VALVE, DISCHARGE, 7.0" CYLINDER	2			
13	VRS25705	GASKET, DISCHARGE VALVE SEAT, 6.5", 7.0", 9.5", 10.0" CYL.	2	2	2	2
14	VRS26715A	VALVE, SUCTION, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	1	1		1
15	VRS26725A	VALVE, DISCHARGE, 6.5", 7.0", 9.5", 10.0" CYLINDER, MEDIUM *	1	1		1
16	VRC25067	SCREW, HEAD, CRANK-END, 12-POINT	6			
17	VRC24909	NUT, JAM, PISTON ROD **	1			1
18	VRC24115	ROD, PISTON, 4.0"-4.5" SAHE × 6.5"-7.0" SACE	1			1
19	VRC24709	PISTON, 7.0" SACE STEEPLE CYLINDER, AL	1			1
20	VRC24701	RING, 7.0" PISTON	4		4	4
21	VRC24702	BAND, RIDER, 7.0" PISTON	1		1	1
22	VRC24919	NUT, PISTON	1			1
23	VRC23001A	CASE, PACKING ASSEMBLY ***	1			1
24	VRC23107	SCREW, PACKING CASE, 12-POINT	4			
25	VRS25110	NAMEPLATE, VRS CYLINDER	1			
26	VRC21606	PIN, NAMEPLATE	8			
27	VRS26799	BLANK, VALVE, DISCHARGE, 6.5"-7.0" SACE CYLINDER	1			
28	VRC25144	CYLINDER, STEEPLE, 4.5" SAHE × 7.0" SACE	1			
29	VRC27145	HEAD, 4.5" SAHE CYLINDER	1			
30	VRC25452	O-RING, HEAD, CRANK OUTER- END AND 4.5" SAHE CYLINDER	1	1	1	1
31	VRC25453	COVER, VALVE, SUCTION, 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
32	VRC25454	O-RING, COVER, SUCTION VALVE 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
33	VRC25165	RETAINER, VALVE, SUCTION, 4.5" SAHE CYLINDER	1			
34	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
35	VRC25503	COVER, VALVE, DISCHARGE, 4.5"-5.0" CYLINDER, 4.0"-4.5" SAHE	1			
36	VRC25504	O-RING, COVER DISCHARGE VALVE, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
37	VRC25185	RETAINER, VALVE, DISCHARGE, 4.5" SAHE CYLINDER	1			
38	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5"-5.0" CYL., 4.0"-4.5" SAHE	1	1	1	1
39	VRC26215A	VALVE, SUCTION, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
40	VRC26225A	VALVE, DISCHARGE, 4.0" AND 4.5" SAHE CYLINDER MEDIUM *	1	1		1
41	VRC24415	PISTON, 4.5" SAHE × 6.5"-7.0" SACE STEEPLE CYLINDER, AL	1			1
42	VRC24451	RING, 4.5" PISTON	4		4	4
43	VRC24452	BAND, RIDER, 4.5" PISTON	1		1	1
44	VRC27146	SPACER, 4.0"-4.5" SAHE HEAD, 1/4"	1			
45	VRC27147	SPACER, 4.0"-4.5" SAHE HEAD, 1/2"	1			
46	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD	6			
47	VRC25100	NAMEPLATE, VRC CYLINDER	1			
* Actual site gas conditions may require LIGHT or HEAVY valve springs. See section 6, Valve Parts and Repair Kits.						
** A heavier jam nut may be used if required for balancing. See section 4.19.						
*** Packing case ring kits are available. See section 4.16.						

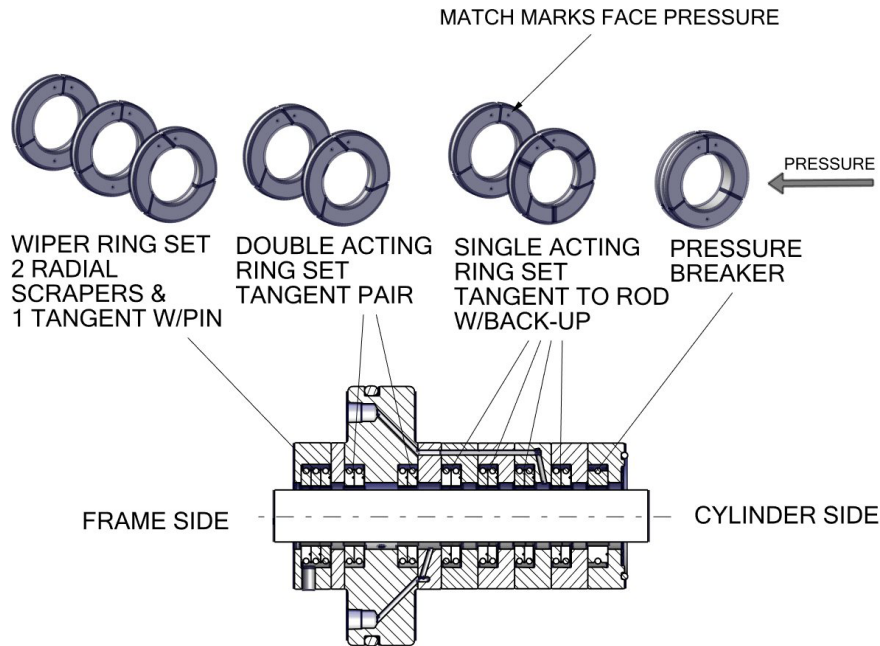
5.19 Pressure Packing, Piston Rod for Steeple Cylinders



PISTON ROD PACKING CASE

NO.	PART NO.	DESCRIPTION	QTY.
	VRC23001A	CASE, PACKING ASSEMBLY	1
1	VRC23321	SPACER, PACKING CASE	1
2	VRC23351	CUP, PACKING, WIPER	1
3	VRC23311	SPACER, PRIMARY VENT	1
4	VRC23241	CUP, PACKING, CENTER	2
5	VRC23231	CUP, PACKING LUBE	1
6	VRC23221	CUP, PACKING, PLAIN	1
7	VRC23211	CUP, PACKING, BOTTOM	1
8	VRC23106	GASKET, WIRE, PACKING CASE NOSE	1
9	VRC23118	STUD, PACKING CASE	3
10	VRC23104	O-RING, PACKING CASE, MOUNTING FLANGE	1
11	VRC23201	FLANGE, PACKING CASE	1
12	VRC23411	RING, PACKING, PRESSURE BREAKER	1
13	VRC23431	RING, PACKING, DOUBLE-ACTING	2
14	VRC23441	RING, PACKING, WIPER	1
15	VRC23421	RING, PACKING, SINGLE-ACTING	4
16	VRC23109	NUT, LOCK, PACKING CASE STUD	3
17	VRC23115	WASHER, SEAL, PACKING CASE STUD	3

5.20 Piston Rod Pressure Packing Kits for Steeple Cylinders



IMPORTANT: Packing rings are to be installed with the punch mark pointing toward the pressure side.

Frame Side	Wiper Ring (1) Set of (3) (VRC23441)	Pressure Side
	Double-acting Ring Set (2) (VRC23431)	
	Primary Vent	
	Single-acting Ring Sets (3) (VRC23421)	
	Oil Supply	
	Single-acting Ring Set (1) (VRC23421)	
	Pressure Breaker Ring (VRC23411)	

PISTON ROD PRESSURE PACKING KITS FOR STEEPLE CYLINDERS		
PART NO.	DESCRIPTION	QTY.
VRC23001A	CASE, PACKING ASSEMBLY, COMPLETE	1
VRC23501	RING KIT, PACKING RENEWAL WITH PARTS INCLUDE: O-RING, NOSE GAS-KET, NUTS AND WASHERS	1 (KIT)
VRC23551	RING KIT, PACKING RENEWAL RINGS ONLY	1 (KIT)

5.21 Cylinder O-ring and Gasket Kits – Steeple Cylinders

CYLINDER O-RING AND GASKET KITS – STEEPLE		
PART NO.	DESCRIPTION	QTY.
VRS25121K	O-RING AND GASKET KIT, 2.25" SAHE × 3.5" SACE, STEEPLE CYLINDER	1
VRS25122K	O-RING AND GASKET KIT, 2.25" SAHE × 4.0" SACE, STEEPLE CYLINDER	1
VRS25124K	O-RING AND GASKET KIT, 2.5" SAHE × 4.5" SACE, STEEPLE CYLINDER	1
VRS25131K	O-RING AND GASKET KIT, 3.0" SAHE × 4.5" SACE, STEEPLE CYLINDER	1
VRS25135K	O-RING AND GASKET KIT, 3.5" SAHE × 4.5" SACE, STEEPLE CYLINDER	1
VRS25125K	O-RING AND GASKET KIT, 2.5" SAHE × 5.0" SACE, STEEPLE CYLINDER	1
VRS25132K	O-RING AND GASKET KIT, 3.0" SAHE × 5.0" SACE, STEEPLE CYLINDER	1
VRS25136K	O-RING AND GASKET KIT, 3.5" SAHE × 5.0" SACE, STEEPLE CYLINDER	1
VRS25133K	O-RING AND GASKET KIT, 3.0" SAHE × 5.5" SACE, STEEPLE CYLINDER	1
VRS25137K	O-RING AND GASKET KIT, 3.5" SAHE × 5.5" SACE, STEEPLE CYLINDER	1
VRS25134K	O-RING AND GASKET KIT, 3.0" SAHE × 6.0" SACE, STEEPLE CYLINDER	1
VRS25138K	O-RING AND GASKET KIT, 3.5" SAHE × 6.0" SACE, STEEPLE CYLINDER	1
VRS25141K	O-RING AND GASKET KIT, 4.0" SAHE × 6.5" SACE, STEEPLE CYLINDER	1
VRS25143K	O-RING AND GASKET KIT, 4.5" SAHE × 6.5" SACE, STEEPLE CYLINDER	1
VRS25142K	O-RING AND GASKET KIT, 4.0" SAHE × 7.0" SACE, STEEPLE CYLINDER	1
VRS25144K	O-RING AND GASKET KIT, 4.5" SAHE × 7.0" SACE, STEEPLE CYLINDER	1
<p>All steeple cylinder O-rings and gasket kits include:</p> <ul style="list-style-type: none"> 1 – O-ring, head, crank-end to frame 2 – O-rings, head, crank and outer end 2 – O-rings, cover, suction valve, CE 2 – O-rings, cover, discharge valve, CE 1 – Gasket, suction valve, CE 2 – Gaskets, discharge valve, CE 1 – O-ring, cover, suction valve, HE 1 – O-ring, cover discharge valve, HE 1 – Gasket, suction valve, HE 1 – Gasket, discharge valve, HE 		

5.22 Steeple Cylinder and Piston/Rod Assemblies

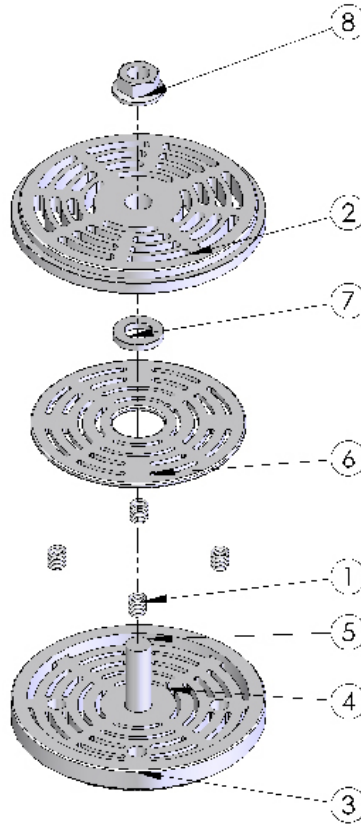
STEEPLE CYLINDER AND PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)		
PART NO.	DESCRIPTION	QTY.
2.5 X 1.375 STEEPLE CYLINDER AND PISTON / ROD		
VRS25112A	CYLINDER STEEPLE 1.375" SAHE X2.5" SACE ASSEMBLY	1
VRC24112A-CI	PISTON AND ROD ASSEMBLY, 2.5CI/1.375CI ST	1
3.0 X 1.375 STEEPLE CYLINDER AND PISTON / ROD		
VRS25113A	CYLINDER STEEPLE 1.375 HEX 3.0 CE ASSEMBLY	1
VRC24113A-CI	PISTON AND ROD ASSEMBLY, 3.0CI/1.375CI ST	1
3.5 X 2.25 STEEPLE CYLINDER AND PISTON / ROD		
VRS25121A	CYLINDER, STEEPLE, 2.25" SAHE X 3.5" SACE, ASSEMBLY	1
VRC24121A-CI/AL	PISTON AND ROD ASSEMBLY, 3.5"CI/2.25"AL STEEPLE CYLINDER (20.20#)	1
4.0 X 2.25 STEEPLE CYLINDER AND PISTON / ROD		
VRS25122A	CYLINDER, STEEPLE, 2.25" SAHE X 4.0" SACE, ASSEMBLY	1
VRC24122A-CI/AL	PISTON AND ROD ASSEMBLY, 4.0"CI/2.25"AL STEEPLE CYLINDER (23.53#)	1
4.5 X 2.5 STEEPLE CYLINDER AND PISTON / ROD		
VRS25124A	CYLINDER, STEEPLE, 2.5" SAHE X 4.5" SACE, ASSEMBLY	1
VRC24124A-AL/AL	PISTON AND ROD ASSEMBLY, 4.5"AL/2.5"AL STEEPLE CYLINDER (18.09#)	1
4.5 X 3.0 STEEPLE CYLINDER AND PISTON / ROD		
VRS25131A	CYLINDER, STEEPLE, 3.0" SAHE X 4.5" SACE, ASSEMBLY	1
VRC24131A-AL/AL	PISTON AND ROD ASSEMBLY, 4.5"AL/3.0"AL STEEPLE CYLINDER (19.00#)	1
4.5 X 3.5 STEEPLE CYLINDER AND PISTON / ROD		
VRS25135A	CYLINDER, STEEPLE, 3.5" SAHE X 4.5" ASSEMBLY	1
VRC24135A-AL/AL	PISTON AND ROD ASSEMBLY, 4.5"AL/3.5"AL STEEPLE CYLINDER (20.15#)	1
5.0 X 2.5 STEEPLE CYLINDER AND PISTON / ROD		
VRS25125A	CYLINDER, STEEPLE, 2.5" SAHE X 5.0" SACE, ASSEMBLY	1
VRC24125A-AL/AL	PISTON AND ROD ASSEMBLY, 5.0"AL/2.5"AL STEEPLE CYLINDER (19.21#)	1
5.0 X 3.0 STEEPLE CYLINDER AND PISTON / ROD		
VRS25132A	CYLINDER, STEEPLE, 3.0" SAHE X 5.0" SACE, ASSEMBLY	1
VRC24132A-AL/AL	PISTON AND ROD ASSEMBLY, 5.0"AL/3.0"AL STEEPLE CYLINDER (20.68#)	1
VRC24132A-CI/AL	PISTON AND ROD ASSEMBLY, 5.0"CI/3.0"AL STEEPLE CYLINDER (33.31#)	1
5.0 X 3.5 STEEPLE CYLINDER AND PISTON / ROD		
VRS25136A	CYLINDER, STEEPLE, 3.5" SAHE X 5.0" SACE, ASSEMBLY	1
VRC24136A-AL/AL	PISTON AND ROD ASSEMBLY, 5.0"AL/3.5"AL STEEPLE CYLINDER (21.83#)	1
VRC24136A-CI/AL	PISTON AND ROD ASSEMBLY, 5.0"CI/3.5"AL STEEPLE CYLINDER (34.46#)	1
All piston/rod assemblies include:		
Pistons	Piston rod	Piston rings
Rider bands	Piston nut	Piston rod jam nut (standard)*
* A heavier jam nut may be required for balancing.		

STEEPLE CYLINDER AND PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)

PART NO.	DESCRIPTION	QTY.
5.5 × 3.0 STEEPLER CYLINDER AND PISTON / ROD		
VRS25133A	CYLINDER, STEEPLER, 3.0" SAHE × 5.5" SACE, ASSEMBLY	1
VRC24133A-AL/AL	PISTON AND ROD ASSEMBLY, 5.5"AL/3.0"AL STEEPLER CYLINDER (22.61#)	1
5.5 × 3.5 STEEPLER CYLINDER AND PISTON / ROD		
VRS25137A	CYLINDER, STEEPLER, 3.5" SAHE × 5.5" SACE, ASSEMBLY	1
VRC24137A-AL/AL	PISTON AND ROD ASSEMBLY, 5.5"AL/3.5"AL STEEPLER CYLINDER (23.79#)	1
6.0 × 3.0 STEEPLER CYLINDER AND PISTON / ROD		
VRS25134A	CYLINDER, STEEPLER, 3.0" SAHE × 6.0" SACE, ASSEMBLY	1
VRC24134A-AL/AL	PISTON AND ROD ASSEMBLY, 6.0"AL/3.0"AL STEEPLER CYLINDER (24.07#)	1
6.0 × 3.5 STEEPLER CYLINDER AND PISTON / ROD		
VRS25138A	CYLINDER, STEEPLER, 3.5" SAHE × 6.0" SACE, ASSEMBLY	1
VRC24138A-AL/AL	PISTON AND ROD ASSEMBLY, 6.0"AL/3.5"AL STEEPLER CYLINDER (25.25#)	1
6.5 × 4.0 STEEPLER CYLINDER AND PISTON / ROD		
VRS25141A	CYLINDER, STEEPLER, 6.5" SAHE × 4.0" SACE, ASSEMBLY	1
VRC24141A-AL/AL	PISTON AND ROD ASSEMBLY, 6.5"AL/4.0"AL STEEPLER CYLINDER (30.31#)	1
6.5 × 4.5 STEEPLER CYLINDER AND PISTON / ROD		
VRS25143A	CYLINDER, STEEPLER, 4.5" SAHE × 6.5" SACE, ASSEMBLY	1
VRC24143A-AL/AL	PISTON AND ROD ASSEMBLY, 6.5"AL/4.5"AL STEEPLER CYLINDER (33.67#)	1
7.0 × 4.0 STEEPLER CYLINDER AND PISTON / ROD		
VRS25142A	CYLINDER, STEEPLER, 4.0" SAHE × 7.0" SACE, ASSEMBLY	1
VRC24142A-AL/AL	PISTON AND ROD ASSEMBLY, 7.0"AL/4.0"AL STEEPLER CYLINDER (21.83#)	1
7.0 × 4.5 STEEPLER CYLINDER AND PISTON / ROD		
VRS25144A	CYLINDER, STEEPLER, 4.5" SAHE × 7.0" SACE, ASSEMBLY	1
VRC24144A-AL/AL	PISTON AND ROD ASSEMBLY, 7.0"AL/4.5"AL STEEPLER CYLINDER (35.13#)	1
* All piston/rod assemblies include: Pistons Piston rod Piston rings Rider bands Piston nut Piston rod jam nut (standard)*		
* A heavier jam nut may be required for balancing.		

6 Valve Parts, Kits, Assemblies

6.1 Valve Parts – Suction Valves

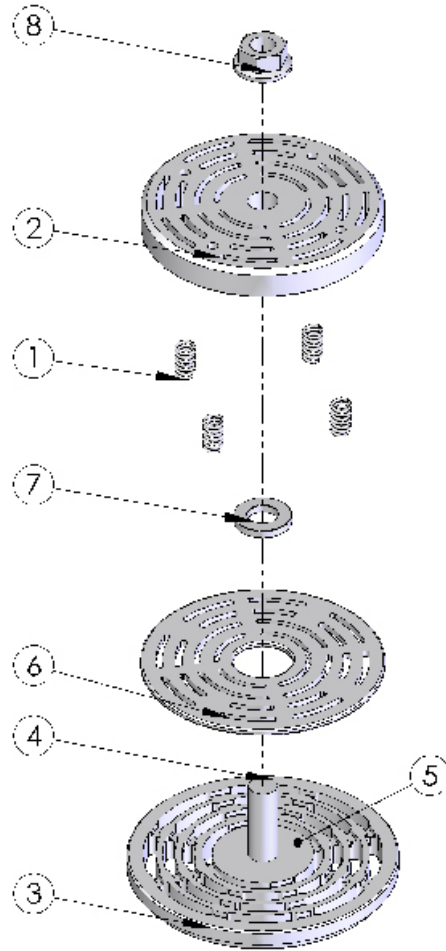


TYPICAL SUCTION VALVE PARTS

NO.	PART NO.	DESCRIPTION	QTY.
1A	VRC26XX1	SPRING, CLOSING, VALVE, LIGHT	3-6
1B	VRC26XX3	SPRING, CLOSING, VALVE, MEDIUM LIGHT	3-6
1C	VRC26XX5	SPRING, CLOSING, VALVE, MEDIUM	3-6
1D	VRC26XX7	SPRING, CLOSING VALVE, HEAVY	3-6
2	VRC26XXX	SEAT, VALVE, SUCTION	1
3	VRC26XXX	GUARD, VALVE, SUCTION	1
4	VRC26XXX	PIN, LOCATING, VALVE	1
5	VRC26XXX	BOLT, CENTER, VALVE	1
6	VRC26XXX	PLATE, VALVE, SUCTION	1
7	VRC26XXX	RING, GUIDE, VALVE	1
8	VRC26XXX	NUT, LOCK, VALVE	1

NOTE: Part numbers are specific to each model valve depending on what size cylinder they are for. Valve repair kits are available, see section 6.3.

6.2 Valve Parts – Discharge Valves



TYPICAL DISCHARGE VALVE PARTS

NO.	PART NO.	DESCRIPTION	QTY.
1A	VRC26XX1	SPRING, CLOSING, VALVE, LIGHT	3-6
1B	VRC26XX3	SPRING, CLOSING, VALVE, MEDIUM LIGHT	3-6
1C	VRC26XX5	SPRING, CLOSING, VALVE, MEDIUM	3-6
1D	VRC26XX7	SPRING, CLOSING, VALVE, HEAVY	3-6
2	VRC26XXX	GUARD, VALVE, DISCHARGE	1
3	VRC26XXX	SEAT, VALVE, DISCHARGE	1
4	VRC26XXX	BOLT, CENTER, VALVE	1
5	VRC26XXX	PIN, LOCATING, VALVE (Part Not Shown)	1
6	VRC26XXX	PLATE, VALVE, DISCHARGE	1
7	VRC26XXX	RING, GUIDE, VALVE	1
8	VRC26XXX	NUT, LOCK, VALVE	1

NOTE: Part numbers are specific to each model valve depending on what size cylinder they are for. Valve repair kits are available, see section 6.3.

6.3 Valve Complete Assemblies and Repair Kits

6.3.1 Valve Types

Arrow compressors use valves made by Hoerbiger Corporation of America, Inc.

- VRC valves are Hoerbiger Model CRO valves.
- VRS valves are Hoerbiger Model CRE valves.

VRC cylinders use VRC valves, and VRS cylinders use VRS valves. Although they may be similar in size, they are NOT interchangeable. Some special cylinders are equipped to use VRS valves in VRC cylinders with special valve retainers designed for this purpose.

6.3.2 Complete Valve Assembly Parts

Complete valve assembly part numbers can be found in the parts list for the specific cylinder size that the valves are needed for. All complete valve assemblies have a part number that ends with the suffix "A" to designate a complete assembly.

6.3.3 Valve Repair Kits

Valve repair kits have the same part number as the valve assembly, but will end with the suffix "K" to designate that it is a repair kit (in place of the "A" suffix used to indicate an assembly).

Valve repair kits contain the normal-wear parts to repair one valve, and consist of:

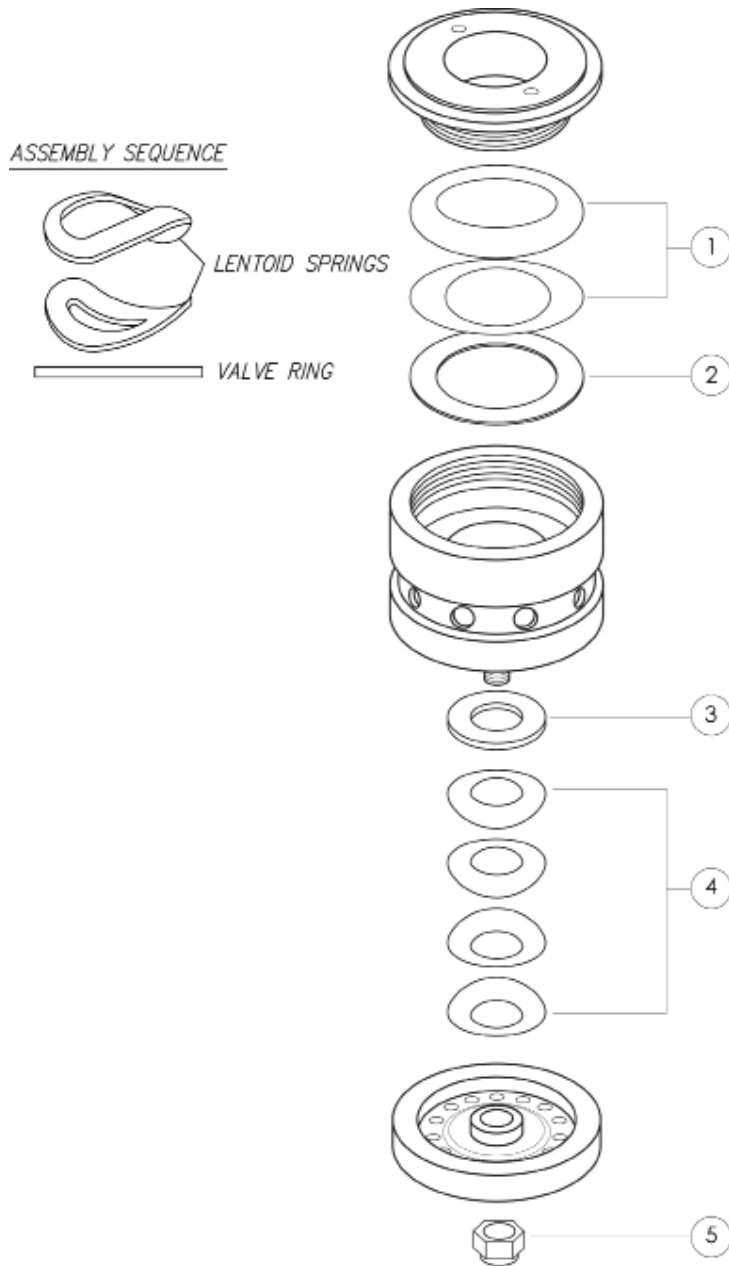
- 1 – Plate, valve
- 1 – Springs, valve (set of all springs required for the specific valve)
- 1 – Nut, lock
- 1 – Ring, guide
- 1 – Pin, locating

NOTE:

Arrow valve repair kits **DO NOT** include **valve seat gaskets**. It is recommended that new valve seat gaskets be used every time a valve is installed. Refer to the specific cylinder size assembly parts list for "Gasket, Suction, and Discharge Valve Seat" part numbers.

Arrow valve repair kits **DO NOT** include **valve cover O-rings** which are reusable, but can be damaged during valve maintenance. They are recommended spare parts to keep on hand. Refer to the specific cylinder size assembly parts lists for "O-ring, Cover, Suction, and Discharge Valve" part numbers.

6.4 Concentric Valve Kit for 1.125-inch Cylinder



CONCENTRIC VALVE KIT - FOR 1.125" CYLINDER

PART NO.	DESCRIPTION	QTY.	
VRCC6125A	Valve, Concentric. 1.125" CNG Assembly		
VRCC6125K	Concentric Valve Repair Kit		
VRCC6125	1	Lentoid springs, suction	2
	2	Suction plate / ring	1
	3	Discharge plate / ring	1
	4	Lentoid springs, discharge	4
	5	Lock nut	1

NOTE: Arrow Valve Repair Kits do not include valve seat gaskets. It is recommended that new valve seat gaskets be used every time a valve is installed. Refer to the specific cylinder size assembly parts list for "Gasket, Suction and Discharge Valve Seat" part numbers.

6.5 Added Clearance Retainer Kits

6.5.1 About Added Clearance Retainer Kits

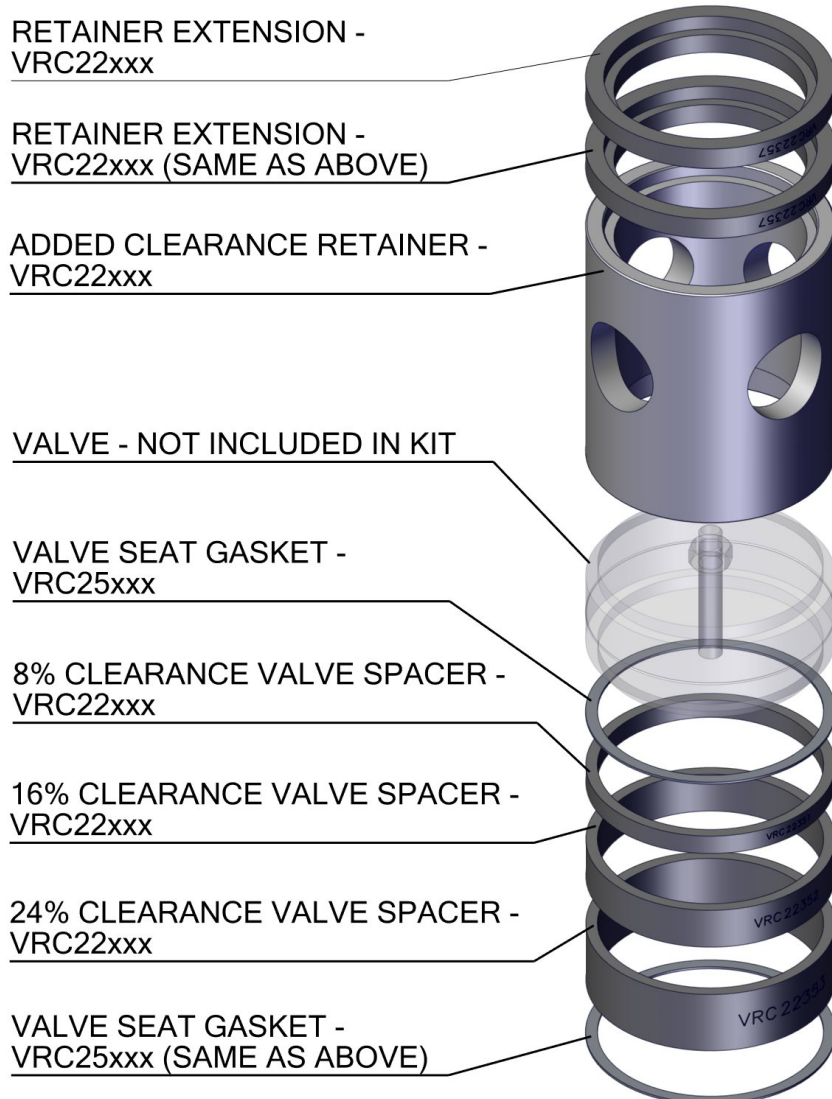
Clearance can be added to the crank-end steep cylinder using the added clearance retainer kits. Clearance can be added in 8 percent increments, by using the 8% valve spacer, or the 16% valve spacer or the 24% valve spacer. Install a valve seat gasket under the spacer and on top of the spacer (under the valve).

For 8% added clearance install the 8% spacer, both gaskets, the added clearance retainer and both retainer extensions.

For 16% added clearance install the 16% spacer, both gaskets, the added clearance retainer and one retainer extension.

For 24% added clearance install the 24% spacer, both gaskets and the added clearance retainer.

6.5.2 Added Clearance Retainer Kit Contents



ADDED CLEARANCE RETAINER KIT FOR SACE STEEPLE CYLINDERS

PART NO.	DESCRIPTION	QTY.
3.5 SACE CYLINDER – SUCTION VALVE		
VRS22356K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 3.5" SACE CYLINDER	1
KIT INCLUDES:		
VRC22351	1 Spacer, Valve, 8% Clearance, 3.5" SACE Cylinder	
VRC22352	1 Spacer, Valve, 16% Clearance, 3.5" SACE Cylinder	
VRC22353	1 Spacer, Valve, 24% Clearance, 3.5" SACE Cylinder	
VRS22356	1 Retainer, Added Clearance, Suction Valve, 3.5" SACE Cylinder	
VRC22357	2 Retainer Extension, 3.5" SACE Cylinder	
VRC25355	2 Gasket, Suction Valve Seat, 3.5 - 4.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	
4.0 SACE CYLINDER – SUCTION VALVE		
VRS22406K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 4.0" SACE CYLINDER	1
KIT INCLUDES:		
VRC22401	1 Spacer, Valve, 8% Clearance, 4.0" SACE Cylinder	
VRC22402	1 Spacer, Valve, 16% Clearance, 4.0" SACE Cylinder	
VRC22403	1 Spacer, Valve, 24% Clearance, 4.0" SACE Cylinder	
VRS22406	1 Retainer, Added Clearance, Suction Valve, 4.0" SACE Cylinder	
VRC22407	2 Retainer Extension, 4.0" SACE Cylinder	
VRC25355	2 Gasket, Suction Valve Seat, 3.5 - 4.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	
4.5 SACE CYLINDER – SUCTION VALVE		
VRS22456K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 4.5" SACE CYLINDER	1
KIT INCLUDES:		
VRC22451	1 Spacer, Valve, 8% Clearance, 4.5" SACE Cylinder	
VRC22452	1 Spacer, Valve, 16% Clearance, 4.5" SACE Cylinder	
VRC22453	1 Spacer, Valve, 24% Clearance, 4.5" SACE Cylinder	
VRS22456	1 Retainer, Added Clearance, Suction Valve, 4.5" SACE Cylinder	
VRC22457	2 Retainer Extension, 4.5" SACE Cylinder	
VRC25455	2 Gasket, Suction Valve Seat, 4.5 - 5.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	
5.0 SACE CYLINDER – SUCTION VALVE		
VRS22506K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 5.0" SACE CYLINDER	1
KIT INCLUDES:		
VRC22501	1 Spacer, Valve, 8% Clearance, 5.0" SACE Cylinder	
VRC22502	1 Spacer, Valve, 16% Clearance, 5.0" SACE Cylinder	
VRC22503	1 Spacer, Valve, 24% Clearance, 5.0" SACE Cylinder	
VRS22506	1 Retainer, Added Clearance, Suction Valve, 5.0" SACE Cylinder	
VRC22507	2 Retainer Extension, 5.0" SACE Cylinder	
VRC25455	2 Gasket, Suction Valve Seat, 4.5 - 5.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	

ADDED CLEARANCE RETAINER KIT FOR SACE STEEPLE CYLINDERS

PART NO.	DESCRIPTION	QTY.
5.5 SACE CYLINDER – SUCTION VALVE		
VRS22556K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 5.5" SACE CYLINDER	1
KIT INCLUDES:		
VRC22551	1 Spacer, Valve, 8% Clearance, 5.5" SACE Cylinder	
VRC22552	1 Spacer, Valve, 16% Clearance, 5.5" SACE Cylinder	
VRC22553	1 Spacer, Valve, 24% Clearance, 5.5" SACE Cylinder	
VRS22556	1 Retainer, Added Clearance, Suction Valve, 5.5" SACE Cylinder	
VRC22557	2 Retainer Extension, 5.5" SACE Cylinder	
VRC25555	2 Gasket, Suction Valve Seat, 5.5 - 6.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	
6.0 SACE CYLINDER – SUCTION VALVE		
VRS22606K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 6.0" SACE CYLINDER	1
KIT INCLUDES:		
VRC22601	1 Spacer, Valve, 8% Clearance, 6.0" SACE Cylinder	
VRC22602	1 Spacer, Valve, 16% Clearance, 6.0" SACE Cylinder	
VRC22603	1 Spacer, Valve, 24% Clearance, 6.0" SACE Cylinder	
VRS22606	1 Retainer, Added Clearance, Suction Valve, 6.0" SACE Cylinder	
VRC22607	2 Retainer Extension, 6.0" SACE Cylinder	
VRC25555	2 Gasket, Suction Valve Seat, 5.5 - 6.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	
6.5 SACE CYLINDER – SUCTION VALVE		
VRS22656K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 6.5" SACE CYLINDER	1
KIT INCLUDES:		
VRS22651	1 Spacer, Valve, 8% Clearance, 6.5" SACE Cylinder	
VRS22652	1 Spacer, Valve, 16% Clearance, 6.5" SACE Cylinder	
VRS22653	1 Spacer, Valve, 24% Clearance, 6.5" SACE Cylinder	
VRS22656	1 Retainer, Added Clearance, Suction Valve, 6.5" SACE Cylinder	
VRS22657	2 Retainer Extension, 6.5" SACE Cylinder	
VRS25655	2 Gasket, Suction Valve Seat, 6.5", 7.0", 9.5", 10.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	
7.0 SACE CYLINDER – SUCTION VALVE		
VRS22706K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 7.0" SACE CYLINDER	1
KIT INCLUDES:		
VRS22701	1 Spacer, Valve, 8% Clearance, 7.0" SACE Cylinder	
VRS22702	1 Spacer, Valve, 16% Clearance, 7.0" SACE Cylinder	
VRS22703	1 Spacer, Valve, 24% Clearance, 7.0" SACE Cylinder	
VRS22706	1 Retainer, Added Clearance, Suction Valve, 7.0" SACE Cylinder	
VRS22707	2 Retainer Extension, 7.0" SACE Cylinder	
VRS25655	2 Gasket, Suction Valve Seat, 6.5", 7.0", 9.5", 10.0" Cylinder	
VRS29150	1 Instructions, Added Clearance Retainer Kit	

7 Lubrication System

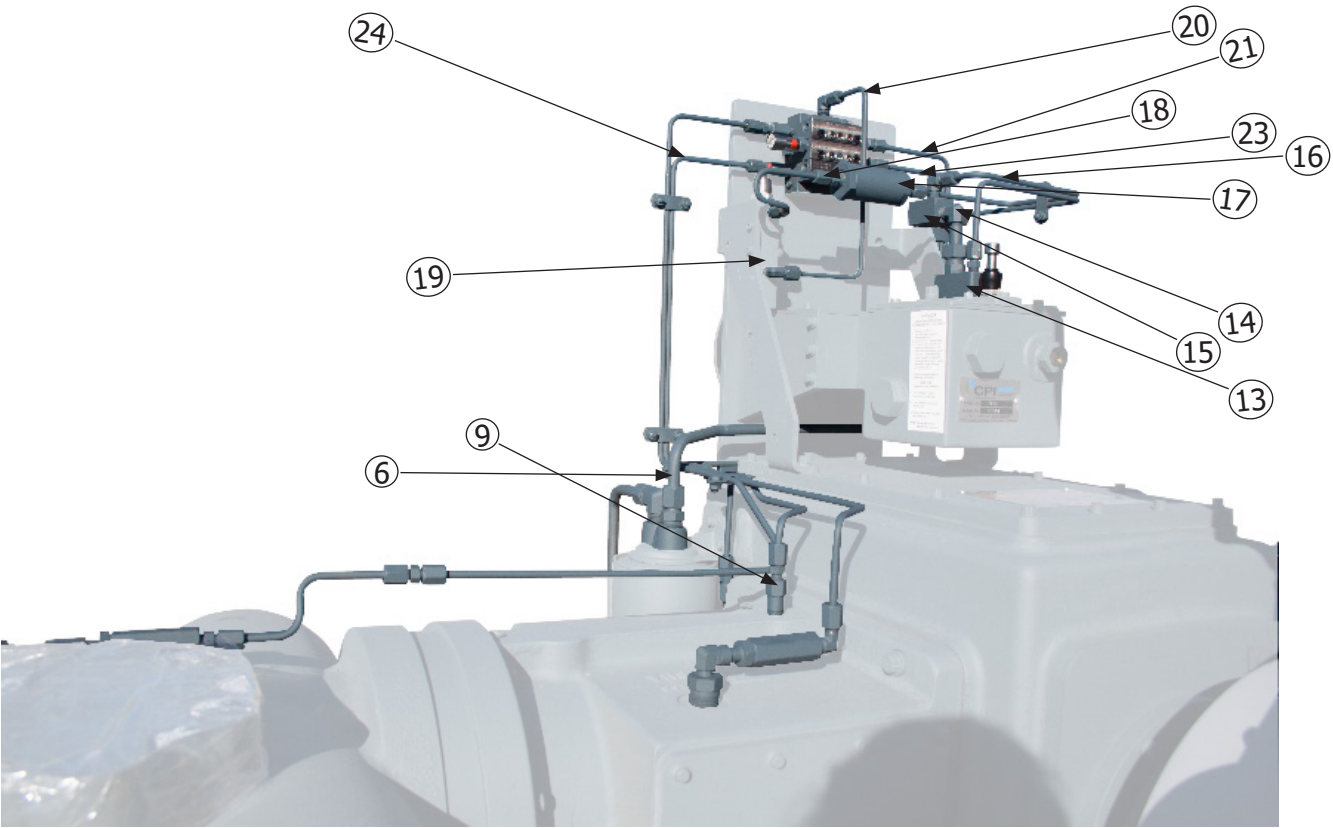
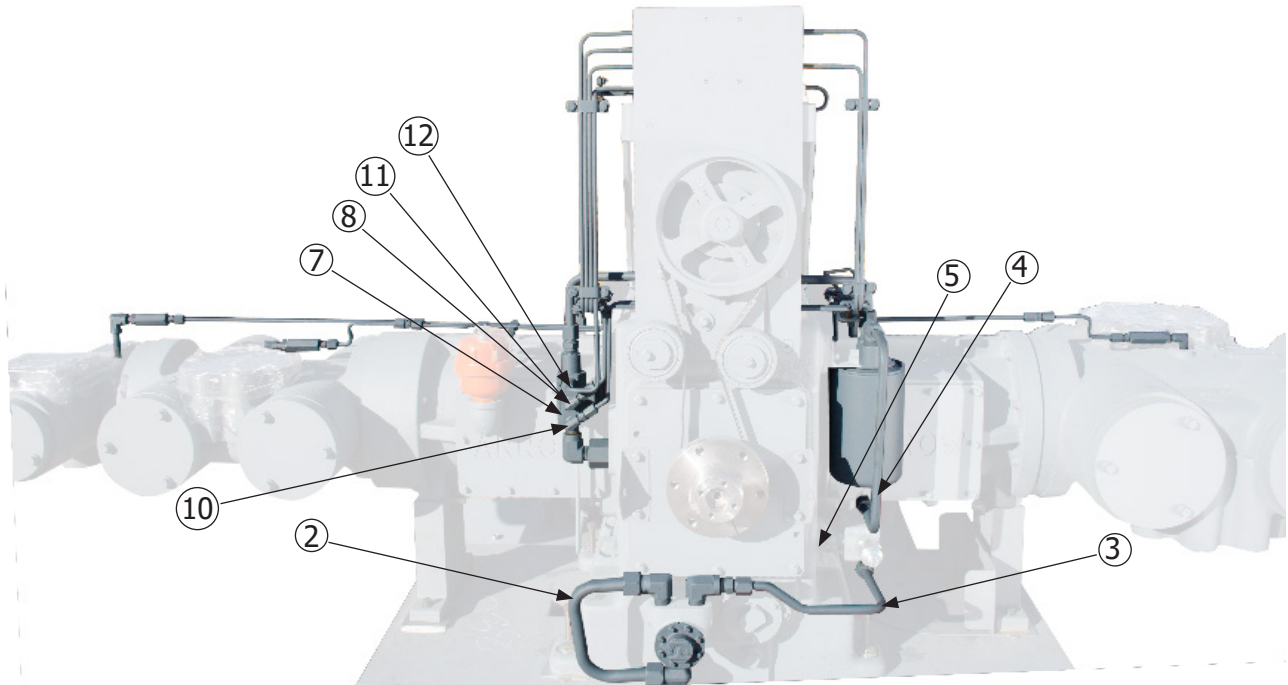
7.1 Divider Blocks

DIVIDER BLOCKS		
PART NO.	DESCRIPTION	QTY.
SINGLE-STAGE/ SINGLE CYLINDER		
VRC28614	BLOCK, DIVIDER, 1-STAGE, 1 CYLINDER, 2.25-4.0 USE WITH 3/16" PUMP VRC28510 @ 1.5 PINTS/DAY, CYCLE TIME 60 SECONDS	1
SINGLE-STAGE		
VRC28602	BLOCK, DIVIDER, 1 (OR 2)-STAGE, 2.5-4.0 USE WITH 3/16" PUMP VRC28510 @ 3.6 PINTS/DAY, CYCLE TIME 25 SECONDS	1
VRC28603	BLOCK DIVIDER 1-STAGE, 4.5-6.0 USE WITH 1/4" PUMP VRC28512 @ 4.8 PINTS/DAY, CYCLE TIME 25 SECONDS	1
VRC28604	BLOCK DIVIDER 1-STAGE, 6.5-8.0 USE WITH 1/4" PUMP VRC28512 @ 6.0 PINTS/DAY, CYCLE TIME 25 SECONDS	1
TWO-STAGE		
VRC28602	BLOCK, DIVIDER, 2 (OR 1)-STAGE 3.0-4.5 × 2.5-4.0 USE WITH 3/16" PUMP VRC28510 @ 3.6 PINTS/DAY, CYCLE TIME 25 SECONDS	1
VRC28600	BLOCK, DIVIDER, 2-STAGE, 4.5-6.5 × 2.5-5.0 USE WITH 1/4" PUMP VRC28512 @ 4.76 PINTS/DAY, CYCLE TIME 22 SECONDS	1
VRC28605	BLOCK, DIVIDER, 2-STAGE, 6.5-8.0 × 3.5-6.5 USE WITH 1/4" PUMP VRC28512 @ 5.85 PINTS/DAY, CYCLE TIME 22 SECONDS	1
THREE-STAGE		
VRC28606	BLOCK, DIVIDER, 3-STAGE, 3.5-5.5 × 3.5-4.5/2.25-2.50 HP WITH 1/4" PUMP VRC28512 @ 5.20 PINTS/DAY, CYCLE TIME 37 SECONDS *	1
VRC28608	BLOCK, DIVIDER, 3-STAGE, 4.0-6.5 × 3.5-5.0/2.25-3.5 USE WITH 3/8" PUMP VRC28514 @ 6.12 PINTS/DAY, CYCLE TIME 22 SECONDS	1
VRC28609	BLOCK, DIVIDER, 3-STAGE, 5.5-7.0 × 4.5-6.0/3.0-3.5 USE WITH 3/8" PUMP VRC28514B @ 6.8 PINTS/DAY, CYCLE TIME 24 SECONDS	1
VRC28601	BLOCK, DIVIDER, 3-STAGE, 7.0-8.0 × 5.0-7.0/3.0-4.5 USE WITH 3/8" PUMP VRC28514 @ 7.50 PINTS/DAY, CYCLE TIME 20 SECONDS	1
* High-pressure system is used when discharge pressure is > 1,200 PSI and requires 5 balancing valves, Part No. VRC28615.		

7.2 Balancing Valves for Divider Blocks

DIVIDER BLOCK VALVES		
PART NO.	DESCRIPTION	QTY.
VRC28615	VALVE, BALANCING, DIVIDER BLOCK *	1
* High-pressure system is used when discharge pressure is > 1,200 PSI and requires 5 balancing valves, Part No. VRC28615.		

7.3 Tubing and Distance Piece Venting



VRS-2 Compressor Lubrication System – Tubing and Venting

LUBRICATION SYSTEM TUBING

	PART NO.	DESCRIPTION	QTY.
1	VRS28800B	TUBING AND FITTINGS KIT COMPLETE	1
1A	VRC28802	CLAMP, TUBING, 2 TUBE (WITH SCREWS AND NUTS)	4
1B	VRC28803	CLAMP, TUBING, 3 TUBE (WITH SCREWS AND NUTS)	4
1C	VRC28804	CLAMP, TUBING, 4 TUBE (WITH SCREWS AND NUTS)	1
2	VRS28810A	TUBING ASSEMBLY, STRAINER TO PUMP	1
2A	VRC28871	FITTING, 1/2" 14 NPT × 3/4" TUBE 90	2
2B	VRS28875-13.2	TUBING, 3/4" 304SS, 13.2" LONG	1
3	VRS28801A	TUBING ASSEMBLY, PUMP TO RV	1
3A	VRS28854	FITTING, 1/2" MNPT X 1/2" FNPT TUBE 90	1
3B	VRC28851	FITTING, 1/2" 14NPT X 1/2" TUBE STR.	1
3C	VRS28850-14.9	TUBING, 1/2" 304SS, 14.9" LONG	1
3D	VRC28815	FITTING, 3/4" 16SAE O-RING X 1/2" TUBE 90	1
4	VRS28811A	TUBING ASSEMBLY, RV TO FILTER INLET	1
4A	VRC28815	FITTING, 3/4" 16SAE O-RING X 1/2" TUBE 90	1
4B	VRS28850-18.7	TUBING, 1/2" 304SS, 18.7" LONG	1
4C	VRC28853	FITTING, 1/2" 14NPT X 1/2" TUBE 90	1
5	VRS28812A	TUBING ASSEMBLY, RV TO SUMP	1
5A	VRC28801	FITTING, 1/2" 14NPTF X 3/4" 16SAE O-RING	1
6	VRS28813A	TUBING ASSEMBLY, FILTER OUTLET TO 6 PORT MANIFOLD	1
6A	VRC28851	FITTING, 1/2" 14NPT X 1/2" TUBE STR.	2
6B	VRS28850-23.3	TUBING, 1/2" 304SS, 23.3" LONG	1
7	VRC28120	MANIFOLD, 6 PORT, CUSTOM	1
7A	VRS28854	FITTING, 1/2" MNPT X 1/2" FNPT TUBE 90	1
8	VRS28830A	TUBING ASSEMBLY, #2 PORT TO THROW 1 CROSSHEAD, TOP	1
8A	VRC28866	FITTING, 1/8" NPTF X 1/4" NPTM 90	1
8B	VRC28823	FITTING, 1/8" 27NPT X 1/4" TUBE STR.	2
8C	VRS28825-38.6	TUBING, 1/4" 304SS, 38.6" LONG	1
8D	VRC28835	FITTING, ORIFICE, .094"	1
9	VRS28831A	TUBING ASSEMBLY, #4 PORT TO THROW 2 CROSSHEAD TOP	1
9A	VRC28866	FITTING, 1/8" NPTF X 1/4" NPTM 90	1
9B	VRC28823	FITTING, 1/8" 27NPT X 1/4" TUBE STR.	2
9C	VRS28825-14.8	TUBING, 1/4" 304SS, 14.8" LONG	1
9D	VRC28823	FITTING, 1/8" 27NPT X 1/4" TUBE STR.	2
9E	VRC28835	FITTING, ORIFICE, .094"	1

LUBRICATION SYSTEM TUBING

	PART NO.	DESCRIPTION	QTY.
10	VRS28832A	TUBING ASSEMBLY, #1 PORT TO CYLINDER LUBE PUMP	1
10B	VRC28821	FITTING, 1/4" 18NPT X 1/4" TUBE STR.	1
10C	VRC28890	FITTING, CHECK VALVE	1
10D	VRS28825-36.3	TUBING, 1/4" 304SS, 36.3" LONG	1
10E	VRC28823	FITTING, 1/8" 27NPT X 1/4" TUBE STR.	1
11	VRS28833A	TUBING ASSEMBLY, #5 PORT TO THROW 2 CROSSHEAD BOTTOM	1
11A	VRC28826	FITTING, 1/4" 18NPT X 1/4" TUBE 90	1
11B	VRS28825-16.9	TUBING, 1/4" 304SS, 16.9" LONG	1
11C	VRC28822	FITTING, 1/8" 27NPT X 1/4" TUBE 90	1
11D	VRC28835	FITTING, ORIFICE, .094"	1
12	VRS28834A	TUBING ASSEMBLY, #3 PORT TO THROW 1 CROSSHEAD BOTTOM	1
12A	VRC28866	FITTING, 1/8" NPTF X 1/4" NPTM 90	1
12B	VRC28823	FITTING, 1/8" NPT X 1/4" TUBE STR.	1
12C	VRS28825-34.0	TUBING, 1/4" 304SS, 34.0" LONG	1
12D	VRC28827	FITTING, UNION 1/4" X 1/4" TUBE STR.	1
12E	VRS28825-21.0	TUBING, 1/4" 304SS, 21.0" LONG	1
12F	VRC28822	FITTING, 1/8" 27NPT X 1/4" TUBE 90	1
12G	VRC28835	FITTING, ORIFICE, .094"	1
13	VRC285XX*	PUMP, OIL, CYLINDER LUBE (SEE SECTION 3.7 FOR PUMPS AVAILABLE AND SECTION 7.1 FOR SIZE REQUIRED)	1
14	VRC28847	FITTING, MANIFOLD 1/8" 27NPTM X 1/4" 18NPTM 90	1
15	VRC28640	MANIFOLD, LUBE PUMP, CUSTOM	1
16	VRS28840A	TUBING ASSEMBLY, LUBE PUMP MANIFOLD TO IN-LINE FILTER	1
16A	VRC28826	FITTING, 1/4" 18NPT X 1/4" TUBE 90	1
16B	VRS28825-18.0	TUBING, 1/4" 304SS, 18.0" LONG	1
16C	VRC28821	FITTING, 1/4" 18NPT X 1/4" TUBE STR.	1
17	VRC28710*	FILTER, LUBE OIL, IN-LINE, 10 MICRON	1
17A	VRC28711*	ELEMENT, FILTER, 10 MICRON	1
* Part is NOT included in the "Tubing and Fittings Complete" kit. It must be ordered separately.			

LUBRICATION SYSTEM TUBING

	PART NO.	DESCRIPTION	QTY.
18	VRS28841A	TUBING ASSEMBLY, IN-LINE FILTER TO NO-FLOW SWITCH	1
18A	VRC28821	FITTING, 1/4" 18NPT X 1/4" TUBE STR.	1
18B	VRS28825-10.0	TUBING, 1/4" 304SS, 10.0" LONG	1
18C	VRC28823	FITTING, 1/8" NPT X 1/4" TUBE STR.	1
19	VRC28720*	SWITCH, NO-FLOW SAFETY	1
20	VRS28842A	TUBING ASSEMBLY, NO-FLOW SWITCH TO DIVIDER BLOCK	1
20A	VRC28822	FITTING, 1/8" 27NPT X 1/4" TUBE 90	1
20B	VRS28825-17.0	TUBING, 1/4" 304SS, 17.0" LONG	1
20C	VRC28826	FITTING, 1/4" NPT X 1/4" TUBE 90	1
21	VRS28860A	TUBING ASSEMBLY, DIVIDER BLOCK TO THROW 2 CYLINDER	1
21A	VRC28823	FITTING, 1/8" NPT X 1/4" TUBE STR.	2
21B	VRS28825-47.0	TUBING, 1/4" 304SS, 47.0" LONG	1
21C	VRC28827	FITTING, UNION 1/4" X 1/4" TUBE STR.	1
21D	VRS28825-8.0	TUBING, 1/4" 304SS, 8.0" LONG	1
21E	VRC28730*	VALVE, CHECK, LUBE OIL, 1/8" NPT	1
21F	VRC28866	FITTING, 1/8" NPTF X 1/4" NPTM 90	1
22	VRS28861A	TUBING ASSEMBLY, DIVIDER BLOCK TO THROW 1 CYLINDER	1
22A	VRC28823	FITTING, 1/8" NPT X 1/4" TUBE STR.	2
22B	VRS28825-39.0	TUBING, 1/4" 304SS, 39.0" LONG	1
22C	VRC28827	FITTING, UNION 1/4" X 1/4" TUBE STR.	1
22D	VRS28825-8.0	TUBING, 1/4" 304SS, 8.0" LONG	1
22E	VRC28730*	VALVE, CHECK, LUBE OIL, 1/8" NPT	1
22F	VRC28866	FITTING, 1/8" NPTF X 1/4" NPTM 90	1
23	VRS28862A	TUBING ASSEMBLY, DIVIDER BLOCK TO PACKING LUBE, THROW 2	1
23A	VRC28823	FITTING, 1/8" NPT X 1/4" TUBE STR.	1
23B	VRS28825-28.0	TUBING, 1/4" 304SS, 28.0" LONG	1
23C	VRC28822	FITTING, 1/8" 27NPT X 1/4" TUBE 90	1
23D	VRC28730*	VALVE, CHECK, LUBE OIL, 1/8" NPT	1
23E	VRC28867	FITTING, 1/8" NPTF X 1/8" NPTM 90	1
23F	VRC28876	FITTING, PACKING, CUSTOM 1/2" 14NPT X 7/16-20	1
23G	VRS28877	HOSE, FLEX ASSEMBLY, PACKING LUBE	1
23H	VRS28878	FITTING, HOSE TO PACKING, 7/16" JICM X 1/8"NPTM STR.	1
*Part is NOT included in the "Tubing and Fittings Complete" kit. It must be ordered separately.			

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ENGINES

A-SERIES	A32	A42	A54 A54E	A62 A62 Turbo A62 Genset
C-SERIES	C-46	C-66	C-96	C-106
KP-SERIES	KP3 KP3TA	KP4 KP4TA	KP6 KP6TA	KP8 KP8TA
VRD-SERIES	VRD30	VRD40	VRD60	VRD100

COMPRESSION PRODUCTS

Compressor Frames VRC-2 VRS-2 VRS-4	CNG Compressor Frames and Packages VRC-CNG	Vapor Recovery Units VRU-1 VRU-2	Gas Lift Packages Electric HP Gas Engine (VR, A-Series, CAT)	Custom Compression Packages
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GAS PRODUCTS

Coalescers

REPLACEMENT PARTS

Waukesha	145G/F817	140G/F554	F18	H24	WAK/1197
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