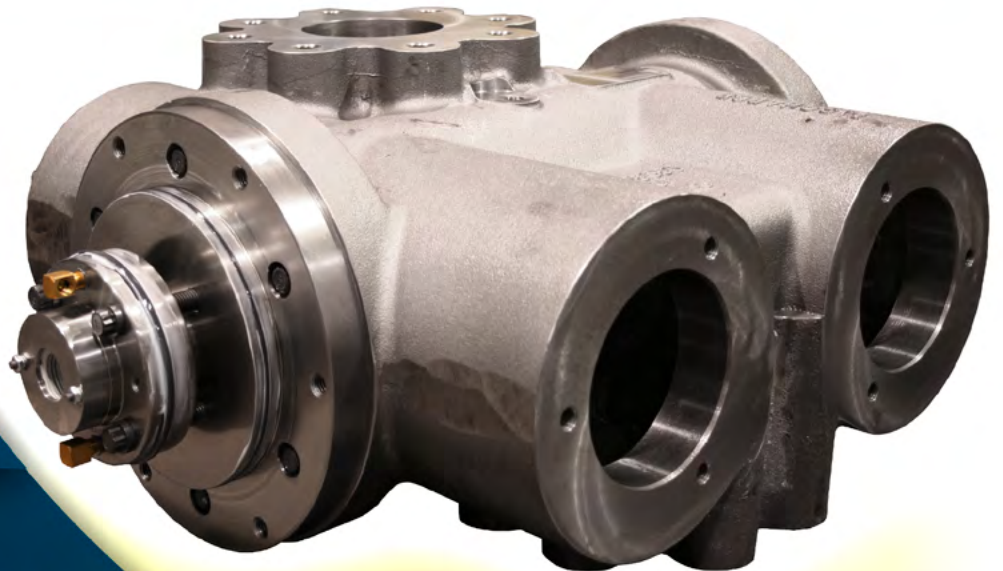




VRC-2 PARTS

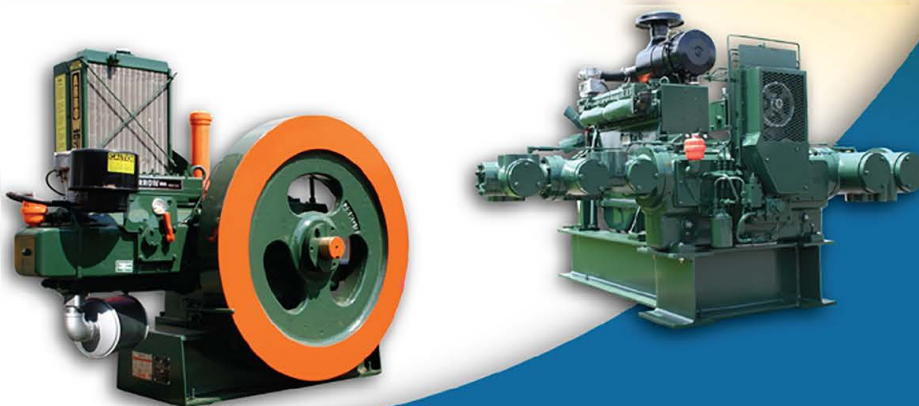




In 1955 Arrow Engine Company opened for business, beginning the tradition of providing premium service and exceptional products to the oil & gas industry, as well as the industrial engine market, throughout the world.

Arrow is a part of IES Infrastructure, which operates as one of four divisions under IES Holdings, Inc. comprised of over 8,000 employees nationwide. IES Infrastructure provides electrical and mechanical apparatus services, custom steel fabrication, and custom power solutions including generator enclosures and bus systems to customers both in the United States and abroad.

With a consistent focus on our customers' needs, striving to help them grow their business, and producing the most reliable equipment and parts in the industry, Arrow has forged a 55-year tradition of excellence.



THANK YOU FOR SELECTING THE ARROW VRC COMPRESSOR!



VRC COMPRESSOR

STANDARD ARROW LIMITED WARRANTY VALIDATION CARD

ARROW ENGINE COMPANY warrants to the purchaser that any new compressor manufactured by **ARROW** will be free of defects in both workmanship and materials for twelve (12) months from the date of initial startup or eighteen (18) months from the date of **ARROW** factory shipment, whichever occurs first.

Owner's Name _____

Address _____

City _____ State _____ Zip _____

Serial No _____ Date Purchased _____

Distributor's Name _____

Exact Compressor Location _____

Driver, Make and Model _____

Discharge & Suction Pressure _____

FOR WARRANTY DETAILS SEE ARROW STANDARD LIMITED WARRANTY.
Send this card to **ARROW** within 10 days after purchase for warranty validation.



VRC COMPRESSOR

STANDARD ARROW LIMITED WARRANTY VALIDATION CARD

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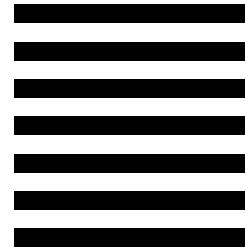
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VRC-2 Compressor Start Up Check List

COMPRESSOR GENERAL INFORMATION

Compressor Model _____	Serial No. _____
Cylinder Serial No. _____	_____
Driver _____	Rated Speed _____
Packager _____	Packager Unit No. _____
Date Packager Shipped _____	Start Up Date _____
Serviceman _____	Customer _____
Location _____	Field Contact _____
Field Telephone No. _____	Unit Location _____
Frame Oil - Make _____	Grade _____
Cylinder Oil - Make _____	Grade _____

NOTES / COMMENTS:

START UP

1. Are the correct Arrow parts book, technical manual, special tools, and spares available?
2. Have the design limitations for the compressor model such as rod load, maximum and minimum speed, discharge temperature been checked?
3. Have the design operating conditions been determined?

YES	NO

Pressure, PSIG (kPa): Suction _____ Discharge _____

Temperature, °F (°C): Suction _____ Discharge _____

Maximum RPM _____ Minimum RPM _____

4. Soft Foot Check: Have the compressor feet and crosshead guide supports been shimmed so that the machine is not twisted or bent?
5. Have bottom crosshead clearances on all corners been checked?
Max. 0.0015" (0.0381 mm) feeler inserted to 1/2" (12.7 mm) Max. depth.
6. Record top crosshead minimum feeler clearance below

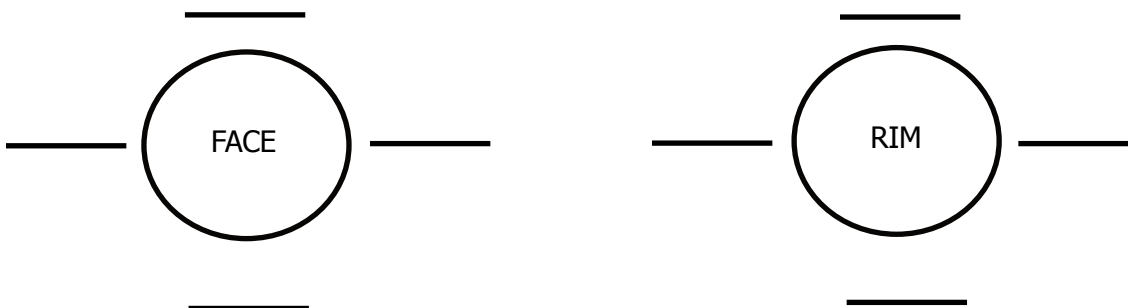
YES	NO

THROW No. 1 _____ 2 _____

7. Have the piping and supports been checked to be sure they do not bend or stress compressor?
8. Have the coupling bolt torque values been rechecked?
9. Has the compressor to driver alignment been checked?
Maximum allowable 0.005" (0.127mm) TIR

YES	NO

10. Record coupling dial indicator readings in inches at the 3, 6, 9, 12 o'clock positions on the lines provided.



Compressor Model _____

Serial No. _____

	YES	NO
27. Is the cylinder lubricator system primed?		
28. Is the cylinder lubrication system no flow shutdown installed and working?		
29. Is the cylinder lubrication overpressure indicator installed? Check rupture disc for color. Aluminum is standard @ 2350 psi.		
30. Has the lubricator instruction plate or Divider Block Selection and Cycle Time (Table 6.2) been checked for proper lube feed rate?		
31. Is there a working vibration shutdown mounted on the compressor?		
32. Are the primary and secondary packing vents and the distance piece vents open, and when necessary, tubed off of the skid or out of the building?		
33. Is there some method of suction pressure control?		
34. Are the suction pressure, inter stage pressure and discharge pressure shutdowns set and working?		
35. Are the safety relief valves installed and set to protect cylinders and piping for each stage of compression?		
36. Are the gas discharge temperature shutdowns installed, set and working?		
37. Have the gas suction lines been blown out to remove water, slag, dirt, etc?		
38. Have temporary screens been installed at cylinder suction?		
39. Has the machine been rolled with the starter to make sure it is free? The oil pressure should come up noticeably while rolling on the starter.		
40. For engine driven units, has the machine been rolled with the starter to make sure it is free? The oil pressure should come up noticeably while rolling on the starter		
41. Does the driver rotation match the compressor rotation?		
42. For machines compressing a combustible gas, have the piping and compressor been purged to remove all air?		
43. Have the start-up instructions for other equipment on the package been followed?		
44. Has the Packager's representative done the required review of the Packager's Start Up and Operating Instructions for the unit with the unit operator?		

AFTER START UP

Compressor Model _____

Serial No. _____

	YES	NO
1. Did the oil pressure come up immediately?		
2. Any strange noises or shaking in the compressor or piping?		
3. Is low oil pressure shutdown set at 25 PSIG		
4. Are the high discharge gas temperature shutdowns set at approximately 10% above normal discharge temperature? 325°F (163°C) to a maximum of 350°F (177°C).		
5. Is the divider block cycle indicator pin moving, and have you set lubricator for proper break-in flow rate?		
6. Are there any oil leaks? If so, where?		
7. Are the scrubber dumps and high level shutdowns working?		
8. Are the scrubbers removing all liquids from the gas? How often do the scrubbers dump? (_____ min.)		
9. Are there sands or oxides in the gas?		
10. Is the overspeed shutdown set?		
11. Are rod packing sealing properly?		
12. Have all safety functions been tested to ensure shutdown of unit upon malfunction?		

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Arrow Engine Company Tulsa, Oklahoma

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***VRC-2 GAS COMPRESSOR
PARTS MANUAL***

• PREFACE •

Definitions - Recommended Spare Parts

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 in section 5.5 of this book.

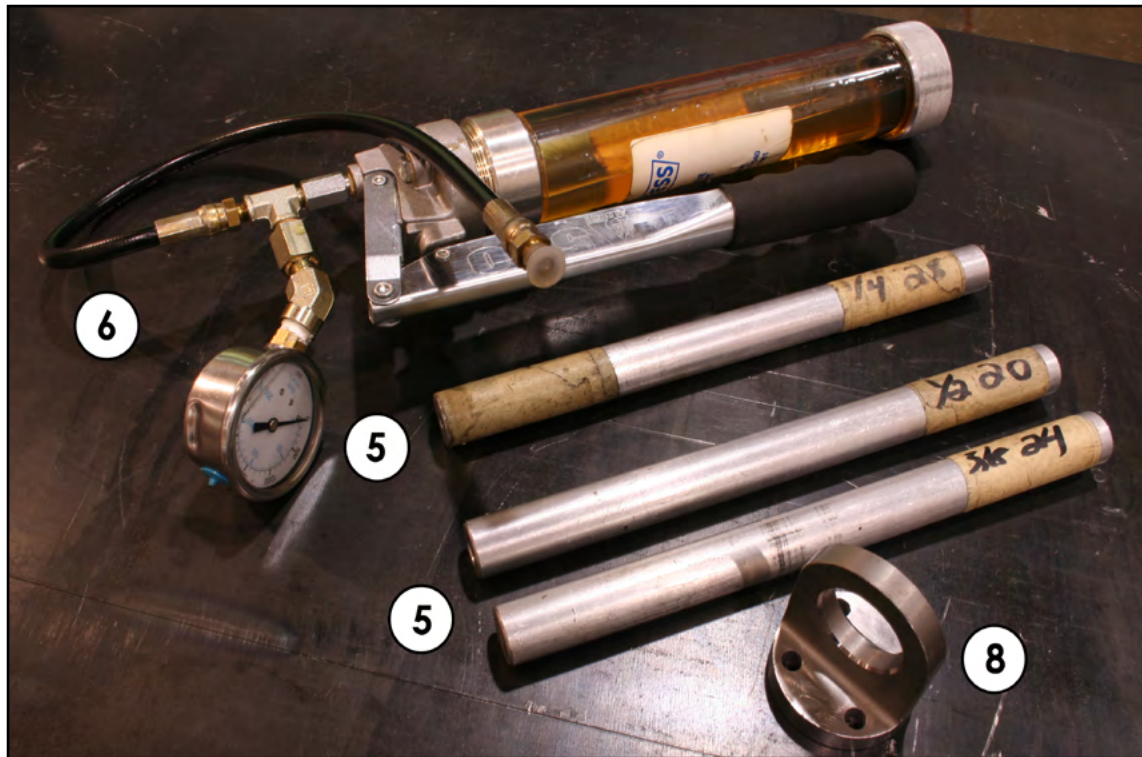
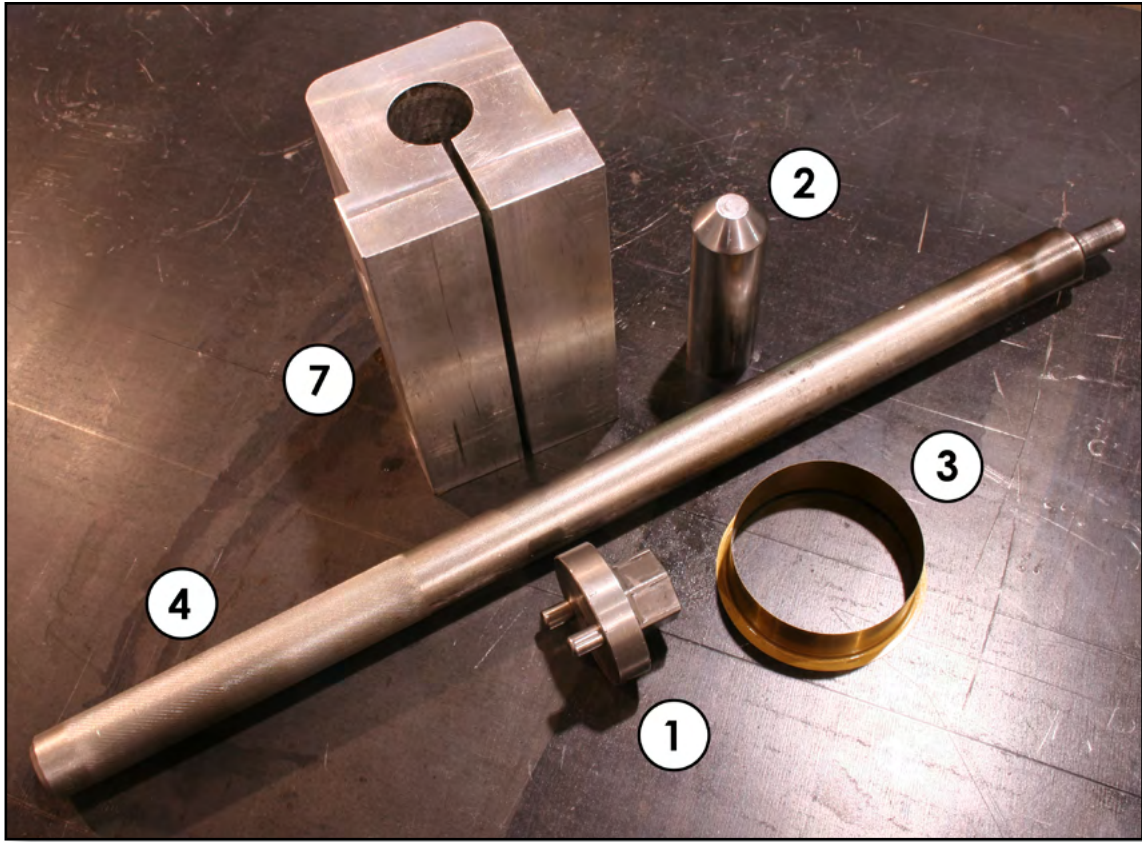
1 Year Spare Parts

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.

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.



• 1 • SPECIAL TOOLS

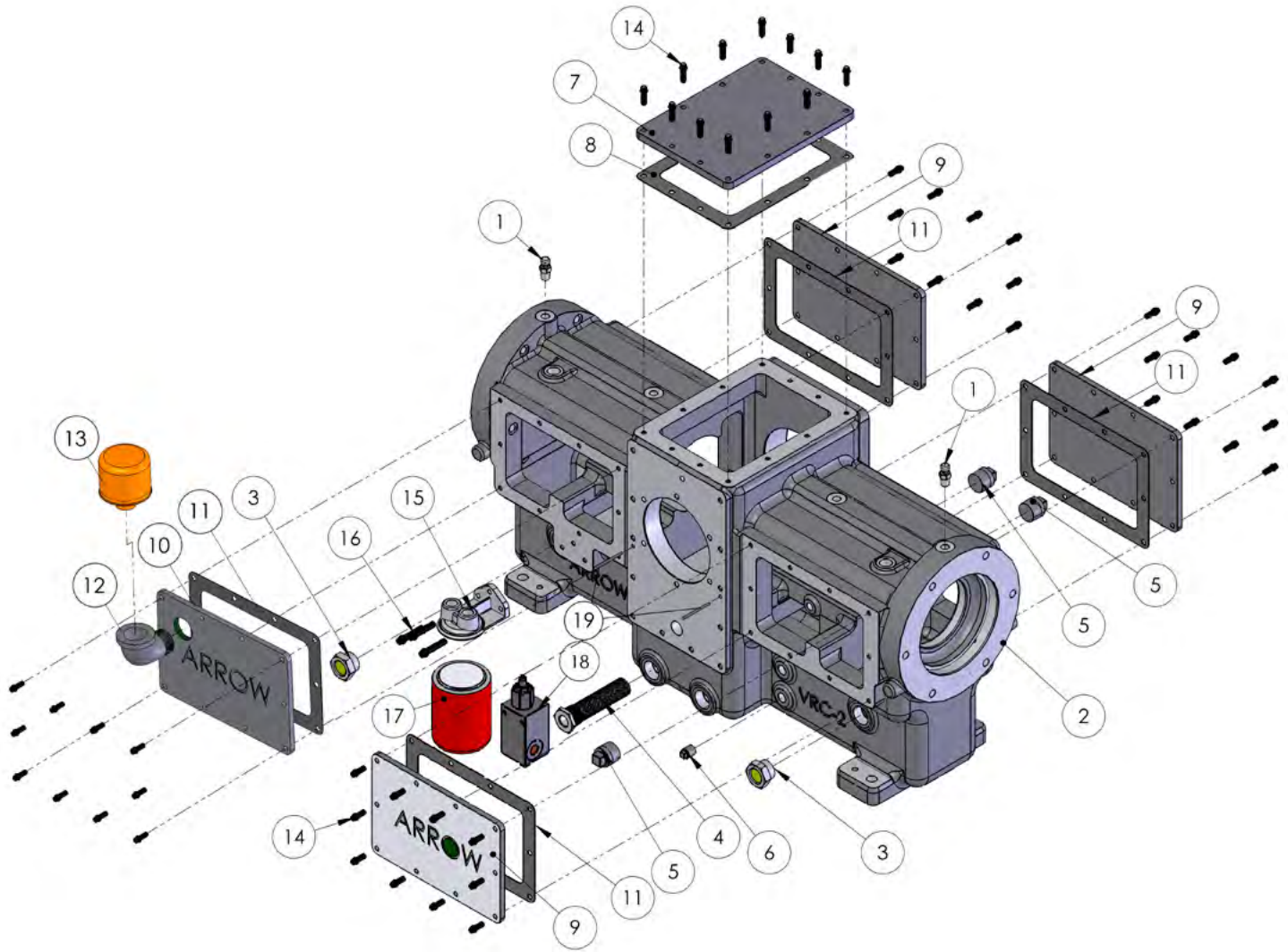
1.1 Recommended and Optional Special Tools

Special tools may be ordered as follows: 1) Tool Box (A complete set of Recommended Tools); 2) Individual Recommended Tools; 3) Individual Optional Tools; or 4) A combination of individual Recommended Tools and individual Optional Tools.

SPECIAL TOOLS AND TOOL BOX					
NUMBER	PART NUMBER	DESCRIPTION OF PART	QUANTITY		
			Std. Issue	Recommended Tool	Optional Tool
TOOL BOX (RECOMMENDED TOOLS)					
	VRC29400A	TOOL BOX (includes): 24" TOOL BOX ADAPTOR, BAR-OVER, CRANKSHAFT PISTON NUT ADAPTOR PISTON ROD ENTERING SLEEVE OIL SEAL ENTERING SLEEVE 2" JAM NUT WRENCH PISTON JAM NUT BAR TOOL, VALVE INSTALLATION, 2.25 - 4.0" CYLS. TOOL, VALVE INSTALLATION, 4.5 - 8.0" CYLS. FILTER, OIL, FRAME	1	1 (TOOL BOX) 1 1 1 1 1 1 1 1 1 1	
INDIVIDUAL RECOMMENDED TOOLS					
	VRC21140	ADAPTOR, BAR-OVER, CRANKSHAFT (not shown)	1	1	
1	VRC29490	PISTON NUT ADAPTOR		1	
2	VRC29492	PISTON ROD ENTERING SLEEVE		1	
3	VRC29482	OIL SEAL ENTERING SLEEVE		1	
4	VRC29499	PISTON JAM NUT BAR		1	
5	VRC29463	TOOL, VALVE INSTALLATION, 2.25 - 4.0" CYLS.		1	
5	VRC29464	TOOL, VALVE INSTALLATION, 4.5 - 8.0" CYLS.		1	
INDIVIDUAL OPTIONAL TOOLS*					
6	VRC29480	HAND PRIMING PUMP *			1
7	VRC29494	PISTON ROD CLAMP *			1
8	VRC29410	TOOL, CRANKSHAFT LIFTING EYE*			
* Not included in Tool Box. These tools must be ordered separately.					

• 2 •
**FRAME PARTS, KITS,
ASSEMBLIES, AND ACCESSORIES**

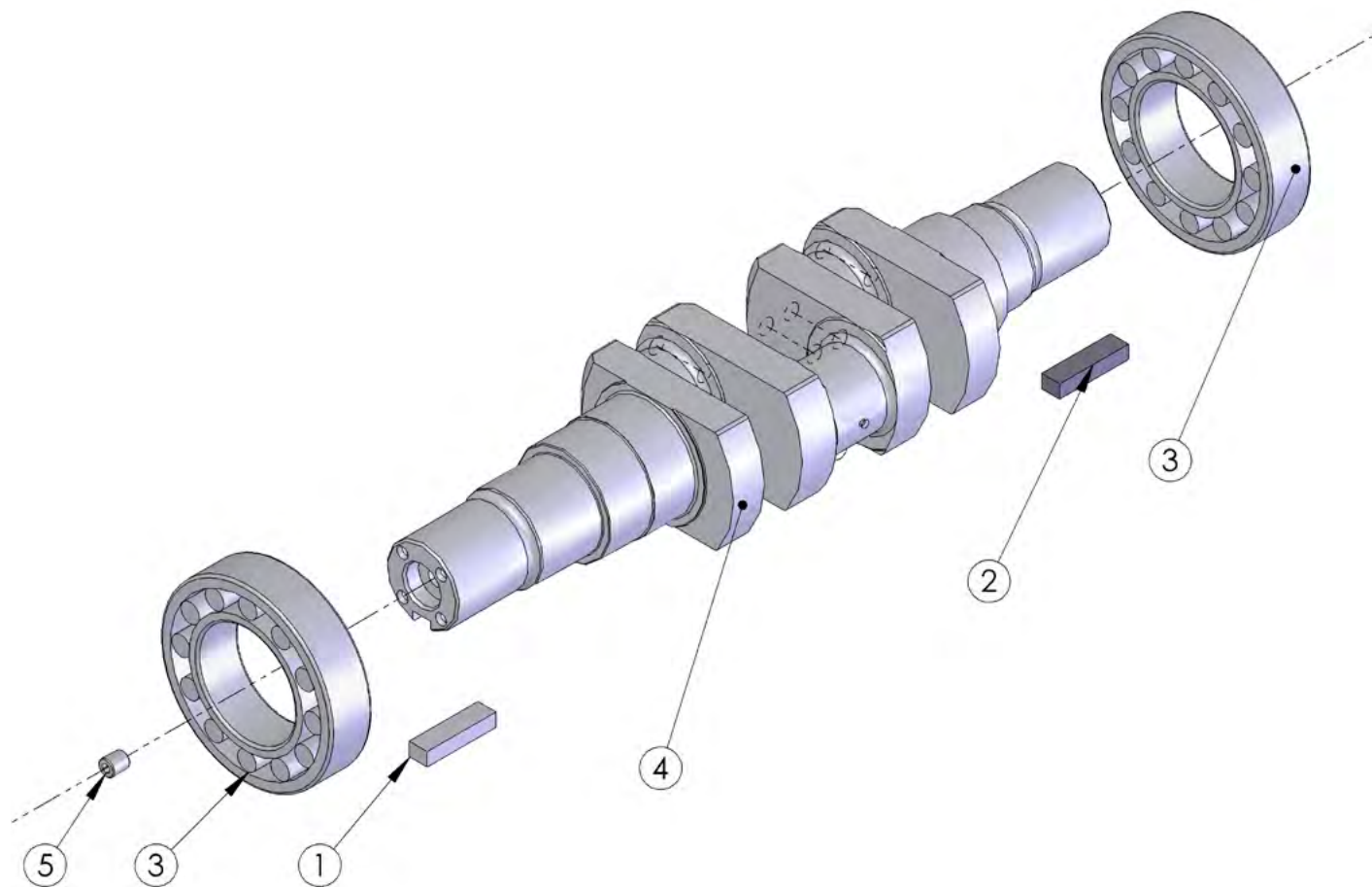
**2.1 Frame Parts - Frame, Covers, Gaskets, Oil Strainer,
Sight Glass and Plugs**



FRAME PARTS

NUMBER	PART NUMBER	DESCRIPTION	PART QTY	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
1	VRC28888	CAP, VENT	2			
2	VRC21020	FRAME (2) TWO-THROW VRC-2 COMPRESSOR	1			
3	VRC21400	SIGHTGLASS, FRAME OIL LEVEL	2			2
4	VRC28341	STRAINER, FRAME OIL (1" NPT)	1			1
5	VRC21519	PLUG, PIPE, 1" NPT	3			
6	VRC21509	PLUG, PIPE, 3/8" NPT	1			
7	VRC21310	COVERPLATE, FRAME, TOP	1			
8	VRC21315	GASKET, COVERPLATE, FRAME, TOP	1	1	1	1
9	VRC21320	COVERPLATE, FRAME, SIDE	3			
10	VRC21321	COVERPLATE, FRAME, SIDE W/BREATHER HOLE	1			
11	VRC21325	GASKET, COVERPLATE, FRAME SIDE	4	4	4	4
12	VRC21419	ELBOW, 1 1/4" STREET 90	1			
13	VRC21410	BREATHER, FRAME VENT	1			1
14	VRC21327	SCREW, TOP COVER, SIDE PLATE, & PUMP SUPPORT, 12 PT	52			
15	VRC28320	BRACKET, MOUNTING, FRAME OIL FILTER	1			
16	VRC28327	SCREW, FILTER BRACKET, 12 PT	3			
17	VRC28310	FILTER, OIL, FRAME	1	2	2	2
18	VRC28350	VALVE, RELIEF, OIL PRESSURE	1			1
19	VRC28006	PIN, DOWEL, HOUSING				

2.2 Frame - Crankshaft Parts



CRANKSHAFT ASSEMBLY

ITEM NUMBER	PART NUMBER	DESCRIPTION	PART QTY	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
VRC21101	VRC21101A	CRANKSHAFT, VRC-2, ASSEMBLY W/MAIN BRGS. (2) (VRC21101)	1			1
	1	VRC21106	KEY, CRANKSHAFT, ACCESSORY-END, VRC-2	1	1	1
	2	VRC21107	KEY, CRANKSHAFT, DRIVE-END, VRC-2	1	1	1
	3	VRC21101	BEARING, CRANKSHAFT MAIN	2		
	4	VRC21100	CRANKSHAFT, VRC-2 COMPRESSOR	1		
	5	VRC21109	PLUG, CRANKSHAFT 1/4" NPT	1		

2.2.1 Crankshaft, Crosshead and Connecting Rod Assemblies

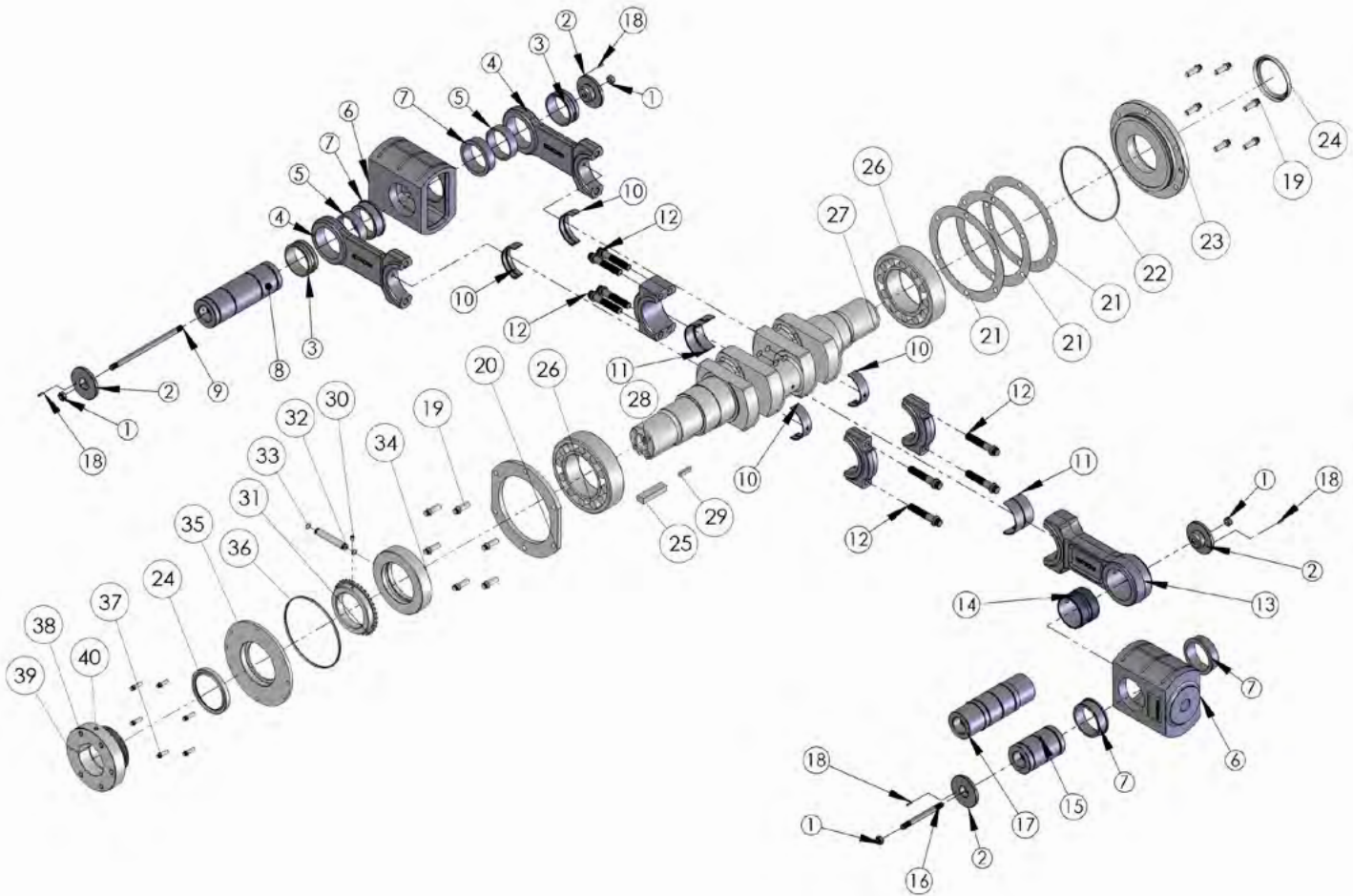
FRAME ASSEMBLIES

PART NUMBER	DESCRIPTION OF PART	QTY.
VRC21101A	CRANKSHAFT, VRC-2, ASSEMBLY w/MAIN BEARINGS	1
VRC22000A	CROSSHEAD, VRC-2 ASSEMBLY w/BUSHINGS	2
VRC21020A	FRAME, TWO-THROW, VRC-2 COMPRESSOR ASSEMBLY	1
VRC21220A	ROD, CONNECTING, LIGHT ASSEMBLY (w/BUSHING & SCREWS)	2
VRC21210A	ROD, CONNECTING, HEAVY, ASSEMBLY (w/BUSHING & SCREWS)	1

Crankshaft Assembly includes (see above):

*Main Bearings
 Crankshaft Accessory-End Key
 Crankshaft Drive-End key,
 1/4" Plug*

2.3 Frame - Crosshead and Connecting Rod Parts



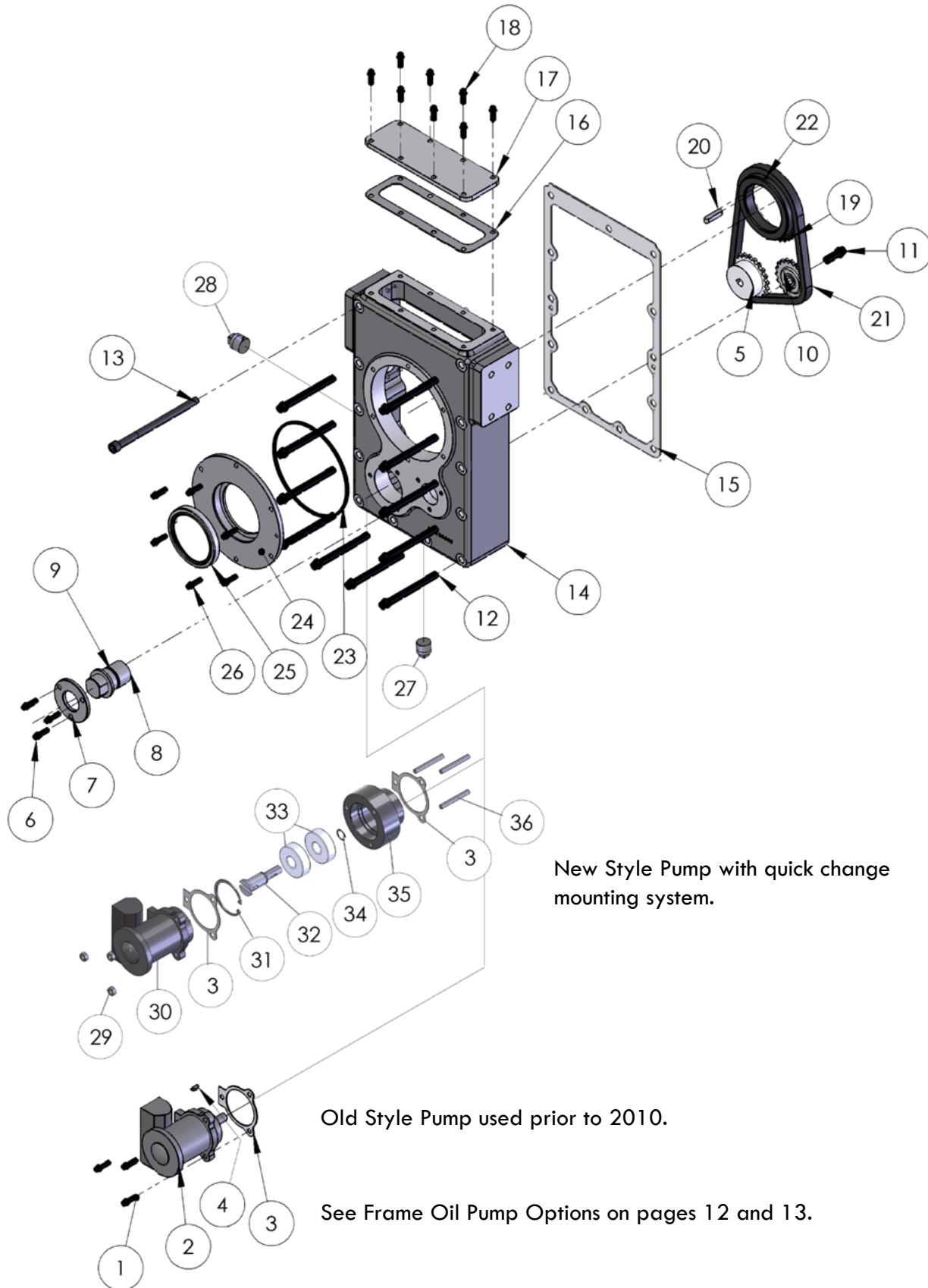
• FRAME • SINGLE AND DOUBLE CONNECTING ROD ASSEMBLY

ITEM NUMBER	PART NUMBER	DESCRIPTION	PART QTY	REC. SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
1	VRC22119	NUT, CROSSHEAD PIN RETAINER STUD	4		2	4
2	VRC22200	CAP, RETAINER, CROSSHEAD PIN (Fits All Pins)	4			4
3	VRC21222	BUSHING, CONNECTING ROD LIGHT (Crosshead Pin) (Included W/Rod)	2			
4	VRC21220A	ROD, CONNECTING, LIGHT, ASSEMBLY (w/Bushings & Screws)	2			2
5	VRC22420	SPACER, PIN, CROSSHEAD, LONG	2			2
6	VRC22000A	CROSSHEAD, VRC-2 COMPRESSOR, ASSEMBLY (w/Bushings)	2			2
7	VRC22002	BUSHING, CROSSHEAD VRC-2 (Included with Crosshead)	4			
8	VRC22120	PIN, CROSSHEAD, LONG (FOR LIGHT RODS)	1			1
9	VRC22128	STUD, CROSSHEAD PIN RETAINER, LONG LT. RODS	1			1
10	VRC21221	BEARING, CONNECTING ROD, LIGHT (Order Kit VRC21232K)***	2			1

• FRAME •
SINGLE AND DOUBLE CONNECTING ROD ASSEMBLY (continued)

ITEM NUMBER	PART NUMBER	DESCRIPTION	PART QTY	REC. SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
11	VRC21211	BEARING, CONNECTING ROD, HEAVY, PAIR (Order Kit VRC21232K)***	2			1
12	VRC21217	SCREW, CONNECTING ROD CAP (Included w/Rods), 12 PT	8			
13	VRC21210A	ROD, CONNECTING, HEAVY, ASSEMBLY (w/Bushing & Screws)	1			1
14	VRC21212	BUSHING, CONNECTING ROD HEAVY (Crosshead Pin) (Included W/Rod)	1			
15	VRC22110	PIN, CROSSHEAD, SHORT (HEAVY ROD WITHOUT WEIGHTS)	1			1
16	VRC22118	STUD, CROSSHEAD PIN RETAINER, SHORT (HEAVY ROD)	1			1
17	VRC22130	PIN, CROSSHEAD, LONG BALANCE (HEAVY. ROD WITH WEIGHTS)*	1			1
18	VRC22206	PIN, ROLL, CROSSHEAD CAP	4			4
19	VRC21117	SCREW, RETAINER, MT. PLATE AND TENSIONER, 12 PT	12			
20	VRC21120	RETAINER, BEARING, ACCESSORY-END	1			
21	VRC21119	SHIM PACK, RETAINER, DRIVE-END	1			1
22	VRC21114	O-RING, RETAINER, DRIVE-END	1			1
23	VRC21110	RETAINER, BEARING, DRIVE-END	1			
24	VRC28024	SEAL, OIL, CRANKSHAFT	2			2
25	VRC21106	KEY, CRANKSHAFT, ACCESSORY END	1		1	1
26	VRC21101	BEARING, CRANKSHAFT, MAIN	2			2
27	VRC21100	CRANKSHAFT, VRC-2 COMPRESSOR	1			1
28	VRC21109	PLUG, CRANKSHAFT, 1/4" NPT (Not shown)	1			1
29	VRC28236	KEY, SPROCKET	1		1	1
30	VRC28239	SETSCREW, DRIVE SPROCKET	1			1
31	VRC28248	SPROCKET, CRANKSHAFT DRIVE	1			1
32	VRC28110	TUBE, OIL, SLINGER	1			
33	VRC28104	O-RING, SLINGER OIL TUBE	2		2	2
34	VRC28100	SLINGER, OIL, LUBE DRIVE	1			1
35	VRC28020	RETAINER, OIL SEAL, CRANKSHAFT	1			
36	VRC28022	O-RING, RETAINER, OIL SEAL	1		1	1
37	VRC28027	SCREW, SEAL RETAINER, 12 PT	6			
38	VRC28425	SHEAVE, BELT, DRIVE, LUBE PUMP	1			
39	VRC28427	SCREW, SHEAVE, DRIVE, LUBE PUMP, 12 PT (not shown)	1			
40	VRC28429	SETSCREW, SHEAVE, DRIVE, LUBE PUMP (not shown)	1			1
Not Shown	VRC22301	WEIGHT, CROSSHEAD PIN, 3.29 LBS, WEIGHT FOR PAIR IS 6.58 LBS**	2			
Not Shown	VRC22303	WEIGHT, CROSSHEAD PIN, 2.7 LBS, WEIGHT FOR PAIR IS 5.4 LBS**	2			
Not Shown	VRC22304	WEIGHT, CROSSHEAD PIN, 1.07 LBS, WEIGHT FOR PAIR IS 2.14 LBS**	2			
* This pin will be used in place of pin (VRC22110) if weights are required to balance opposing throw.						
** Weights to be determined by cylinder configuration. (Weights are not shown)						
*** VRC21232K BEARING KIT. Includes all bearings for connecting rod, heavy and light.						

2.4 Frame Lubrication System: Frame Lubrication System - Chain Drive



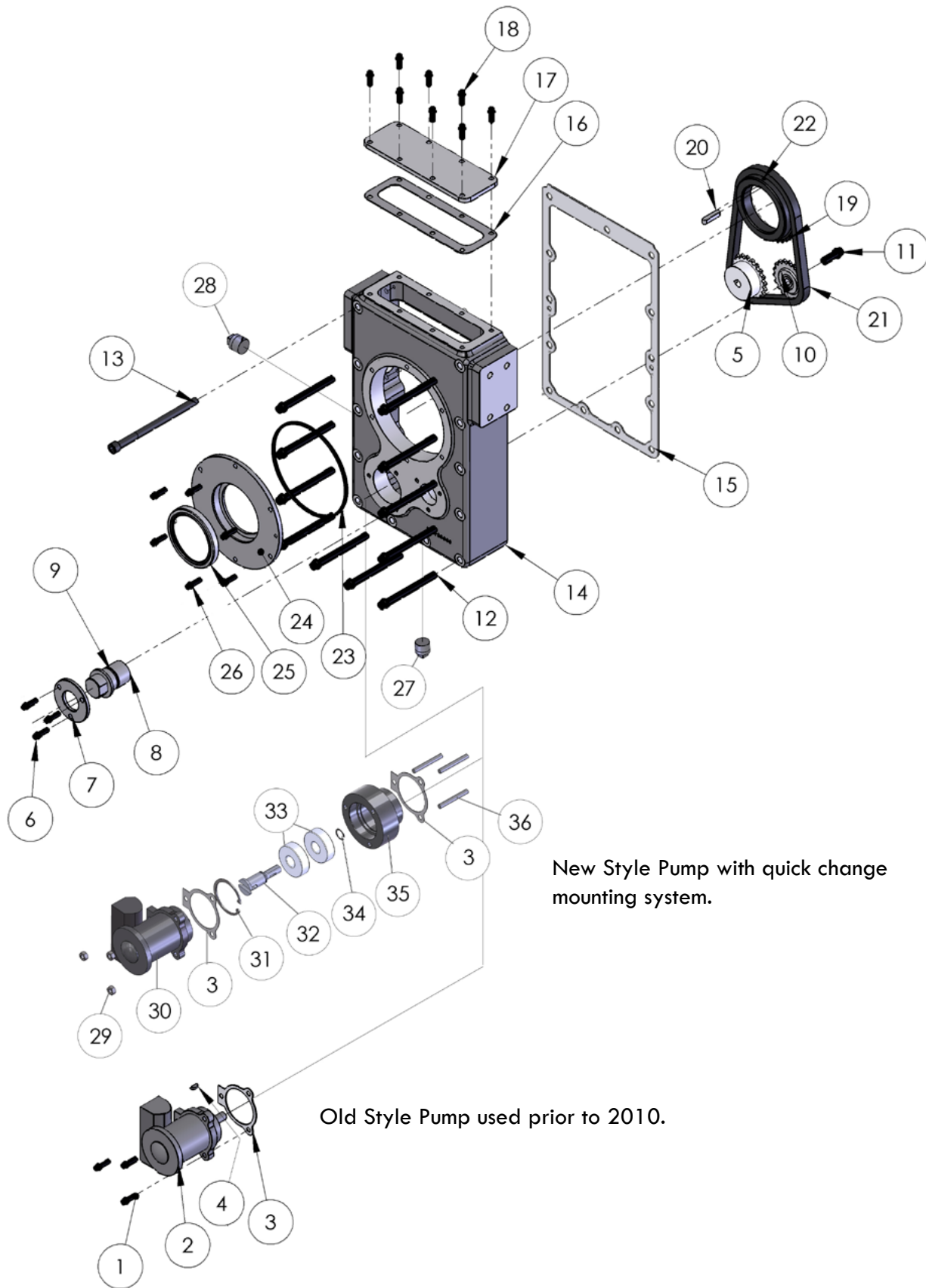
New Style Pump with quick change mounting system.

Old Style Pump used prior to 2010.

See Frame Oil Pump Options on pages 12 and 13.

• FRAME •
FRAME (CHAIN DRIVE) LUBRICATION SYSTEM

ITEM NUMBER	PART NUMBER	DESCRIPTION	PART QTY	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
1	VRC28027	SCREW, PUMP, FRAME OIL, 12 PT	3			
2	VRC28300	PUMP, OIL, FRAME (Old Style)	1		1	
3	VRC28305	GASKET, PUMP, FRAME OIL	2		1	1
4	VRC28236	KEY, SPROCKET	1		1	1
5	VRC28232	SPROCKET, DRIVE, FRAME OIL PUMP	1			1
6	VRC28027	SCREW, CLAMP, IDLER CHAIN, 12 PT	3			3
7	VRC28253	CLAMP, IDLER, CHAIN	1			1
8	VRC28250	IDLER, CHAIN, FRAME OIL PUMP	1			
9	VRC28254	O-RING, IDLER, CHAIN	1			1
10	VRC28220	SPROCKET, IDLER, CHAIN	1			1
11	VRC28227	SCREW, IDLER, SPROCKET, 12 PT	1			1
12	VRC28007	SCREW, HOUSING, 12 PT	11			
13	VRC28067	SCREW, HOUSING AND IDLER (Socket Head)	1			
14	VRC28000	HOUSING, LUBE OIL DRIVE	1			
15	VRC28005	GASKET, HOUSING, LUBE OIL DRIVE	1	1	1	1
16	VRC28015	GASKET, COVERPLATE, HOUSING	1	1	1	1
17	VRC28010	COVERPLATE, HOUSING, LUBE OIL DRIVE	1			
18	VRC28017	SCREW, HOUSING COVERPLATE, 12 PT	8			
19	VRC28248	SPROCKET, CRANKSHAFT DRIVE	1			1
20	VRC28206	KEY, DRIVE SPROCKET	1			1
21	VRC28200	CHAIN, DRIVE, ENDLESS RIVETED	1			1
22	VRC28239	SETSCREW, DRIVE SPROCKET	1			
23	VRC28022	O-RING, RETAINER, OIL SEAL	1			1
24	VRC28020	RETAINER, OIL SEAL CRANKSHAFT	1			
25	VRC28024	SEAL, OIL, CRANKSHAFT	2			2
26	VRC28027	SCREW, SEAL RETAINER, 12 PT	6			
27	VRC21529	PLUG, PIPE, 1/2" NPT	1			
28	VRC21519	PLUG, PIPE, 1" NPT	1			
29	VRC28489	NUT, BELT GUARD & OIL PUMP	3			
30	VRC28301	PUMP, OIL, FRAME - WITH TANG SHAFT	1		1	
31	VRC28335	RING, RETAINING, LARGE, PUMP MOUNT	1			
32	VRC28332	SHAFT, PUMP MOUNT, FRAME OIL	1			
33	VRC28333	BEARING, SHAFT, PUMP MOUNT	2			
34	VRC28334	RING, RETAINING, SMALL, PUMP MOUNT	1			
35	VRC28331	MOUNT, PUMP, FRAME OIL	1			
36	VRC28337	STUD, PUMP MOUNT	3			



New Style Pump with quick change mounting system.

Old Style Pump used prior to 2010.

2.4.1 FRAME OIL PUMP OPTIONS

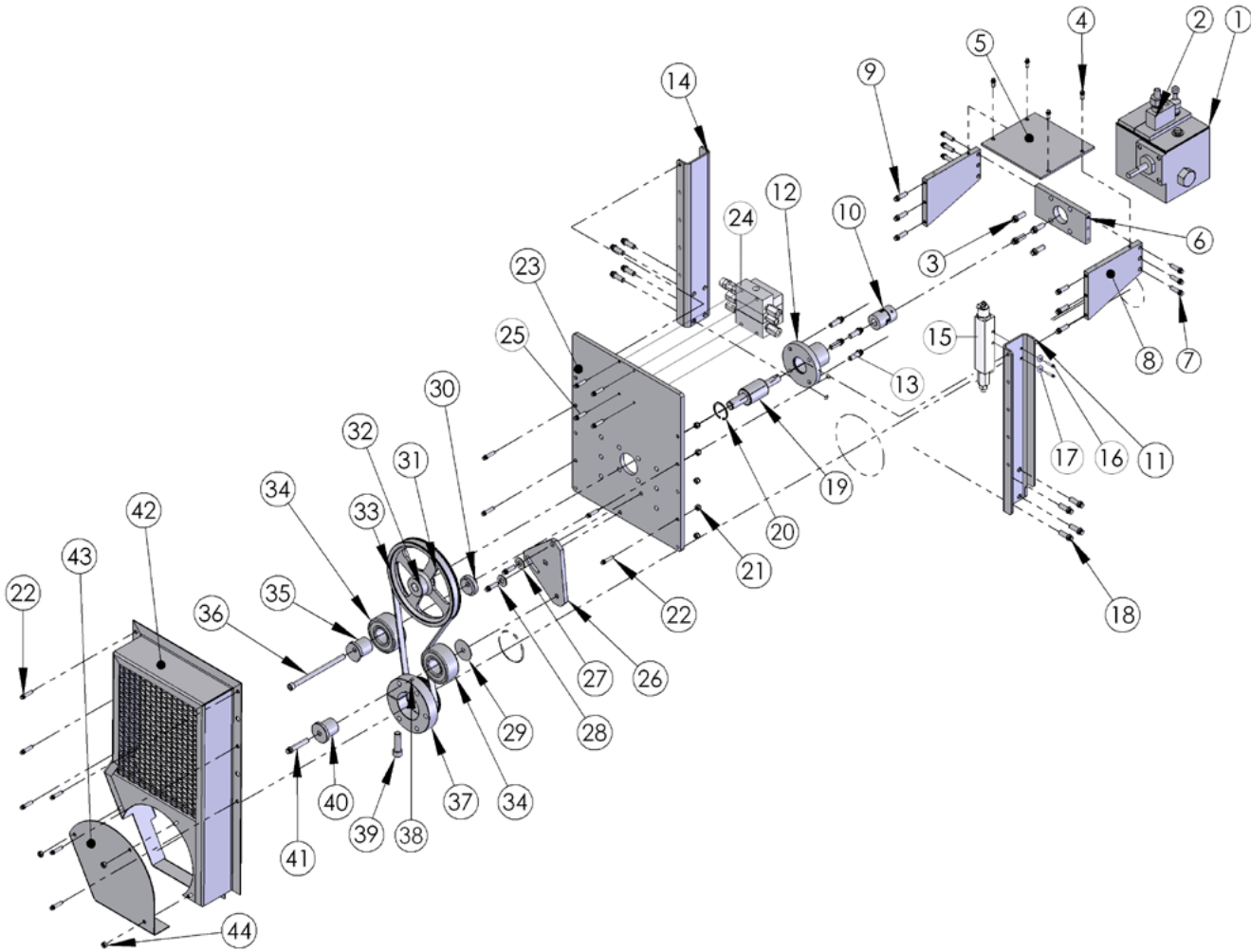
The new style pump (VRC28301) with a short tang shaft is provided as a standard on compressors built from 2010 onward (with serial number greater than or equal to 1001). The old style pump (VRC28300) with the longer keyed shaft was provided on compressors built prior to 2010.

The new style pump requires the quick change mounting assembly. This allows the pump to be changed without having to open up the lube oil housing to remove the oil pump drive sprocket. This new mount system reduces the labor required to change the frame oil pump.

A retrofit kit is available with all the parts necessary to change from the old style pump to the new style pump and pump mounting assembly.

1 FRAME OIL PUMP RETROFIT KIT						
ITEM NUMBER	PART NUMBER	DESCRIPTION	PART QTY	RECOMMENDED SPARE PARTS		
				Start-Up	Minor	Major
	VRC28330K	KIT, MOUNT, PUMP, FRAME OIL - TO RETROFIT PUMP VRC28300 TO VRC28301	1			
3	VRC28305	GASKET, PUMP, FRAME OIL	2			
29	VRC28489	NUT, BELT GUARD & OIL PUMP	3			
30	VRC28301	PUMP, OIL, FRAME- WITH TANG SHAFT	1		1	
VRC28330A	VRC28330A	MOUNT, PUMP, FRAME OIL, ASSEMBLY (USED W/PUMP VRC28301)	1			
	31	VRC28335	RING, RETAINING, LARGE, BEARING, PUMP MOUNT	1		
	32	VRC28332	SHAFT, PUMP MOUNT, FRAME OIL	1		
	33	VRC28333	BEARING, SHAFT, PUMP MOUNT	2		
	34	VRC28334	RING, RETAINING, SMALL, SHAFT, PUMP MOUNT	1		
	35	VRC28331	MOUNT, PUMP, FRAME OIL	1		
36	VRC28337	STUD, PUMP MOUNT	3			
Sec 5.1, 2	VRC28810B	TUBING ASSEMBLY, STRAINER TO PUMP	1			
Sec 5.1, 4	VRC28811B	TUBING ASSEMBLY, RV TO FILTER INLET	1			
Sec 5.1, 5	VRC28812B	TUBING ASSEMBLY, RV TO SUMP	1			

2.5 Frame Lubrication System: Cylinder Lubrication System – Belt Drive



• FRAME • CYLINDER LUBRICATION (BELT DRIVE) SYSTEM

ITEM NUMBER	PART NUMBER	DESCRIPTION	PART QTY	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC28500A	PUMP, OIL, CYLINDER LUBE, 3/16" w/RESERVOIR				
	VRC28502A	PUMP, OIL, CYLINDER LUBE, 1/4" w/RESERVOIR				
	VRC28504A	PUMP, OIL, CYLINDER LUBE, 3/8" w/RESERVOIR				
1	VRC28530	RESERVOIR, PUMP, CYLINDER LUBE	1			
2A	VRC28510	PUMP, OIL, CYLINDER LUBE, 3/16" *	1	1		1
2B	VRC28512	PUMP, OIL, CYLINDER LUBE, 1/4" *	1	1		1
2C	VRC28514	PUMP, OIL, CYLINDER LUBE, 3/8" *	1	1		1
3	VRC21117	SCREW, LUBE OIL PUMP, 12 PT	4			
4	VRC28017	SCREW, TOP PLATE, 12 PT	4			
5	VRC28570	PLATE, TOP PUMP SUPPORT	1			
6	VRC28572	PLATE, END PUMP SUPPORT	1			
7	VRC21327	SCREW, PLATE, SIDE PUMP SUPPORT, 12 PT	6			

**• FRAME •
CYLINDER LUBRICATION (BELT DRIVE) SYSTEM**

ITEM NUMBER	PART NUMBER	DESCRIPTION	PART QTY	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
8	VRC28571	PLATE, SIDE PUMP SUPPORT	2			
9	VRC21117	SCREW, PLATE SUPPORT, 12 PT	6			
10	VRC28573	COUPLING, SHAFT, LUBE OIL PUMP	1			1
11	VRC28551	SUPPORT, PLATE, MOUNTING, LEFT	1			
12	VRC28560	FLANGE, MOUNTING, CYLINDER LUBE PUMP***	1			
13	VRC28427	SCREW, MOUNTING FLANGE, 12PT	4			
14	VRC28552	SUPPORT, PLATE, MOUNTING, RIGHT	1			
15	VRC28720	SWITCH, NO-FLOW	1			
16	VRC28727	SCREW, NO-FLOW SWITCH	2			
17	VRC28728	LOCKNUT, NYLON, NO-FLOW SWITCH	2			
18	VRC21117	SCREW, PLATE SUPPORT, 12 PT	8			
19	VRC28581	SHAFT, INTEGRAL BEARING, LUBE OIL PUMP***	1			
19A***	VRC28565A	FLANGE & INTEGRAL BEARING SHAFT ASSEMBLY - Includes: VRC28560 - FLANGE, MOUNTING, CYLINDER LUBE PUMP VRC28581 - SHAFT, INTEGRAL BEARING, LUBE OIL PUMP VRC28583 - RING, RETAINING, PUMP SHAFT"				
20	VRC28583	RING, RETAINING, PUMP SHAFT***	1			
21	VRC28559	NUT, LOCK, MOUNTING PLATE	10			
22	VRC28557	SCREW, MOUNTING PLATE, AND BLT GRD, 12 PT	10			
23	VRC28550	PLATE, MOUNTING, CYLINDER LUBE PUMP	1			
24	VRC286XX	BLOCK, DIVIDER, CYLINDER LUBE OIL **	1		1	
25	VRC28607	SCREW, DIVIDER BLOCK, 12 PT	1			
26	VRC28472	PLATE, ADJUSTING BELT TENSIONER	1			
27	VRC28476	WASHER, ADJUSTING PLATE 3/8"	1			
28	VRC21117	SCREW, ADJUSTING BELT TENSIONER, 12 PT	2			
29	VRC28475	WASHER, BELT TENSIONER	1			
30	VRC28473	SPACER, IDLER, ECCENTRIC BELT	1			
31	VRC28465	SHEAVE, BELT, DRIVEN, LUBE PUMP	1			
32	VRC28239	SETSCREW, DRIVE SPROCKET	1			
33	VRC28400	BELT, DRIVE, CYLINDER LUBE PUMP	1	1	1	1
34	VRC28470	BEARING, IDLER AND TENSIONER, BELT	2		1	2
35	VRC28474	SLEEVE, IDLER, ECCENTRIC BELT	1			
36	VRC28067	SCREW, HOUSING AND IDLER (Socket Head)	1			
37	VRC28425	SHEAVE, BELT, DRIVE, LUBE PUMP	1			
38	VRC28429	SET SCREW, SHEAVE, BELT, DRIVEN, LUBE PUMP	1			
39	VRC25017	SCREW, SHEAVE, DRIVE, LUBE PUMP, 12 PT	1			
40	VRC28471	SLEEVE, TENSIONER, BELT	1			
41	VRC28477	SCREW, IDLER SHEAVE, 12 PT	1			
42	VRC28480	GUARD, BELT, CYLINDER LUBE PUMP	1			
43	VRC28481	COVER, ACCESSORY DRIVE, BELT GUARD	1			
44	VRC28559	NUT, BELT GUARD	3			

* Refer to Divider Block section 6.1 for required pump size.

** Refer to Divider Block section 6.1 for required block part number.

*** Assembly not shown

2.6 Frame Kits

2.6.1 Connecting Rod Bearing Kit

BEARING KIT

PART NUMBER	DESCRIPTION OF PART	QTY.
VRC21232K	BEARING KIT, CONNECTING ROD, HEAVY AND LIGHT *	1
* Kit contains all bearings for both heavy and light connecting rods.		

2.6.2 Frame Gasket Kit

FRAME GASKET KIT

PART NUMBER	DESCRIPTION OF PART	QTY.
VRC21025K	GASKET KIT, FRAME, VRC-2 COMPRESSOR	1
Kit Contains: 1 - Gasket, Coverplate, Frame Top 4 - Gasket, Coverplate, Frame Side		

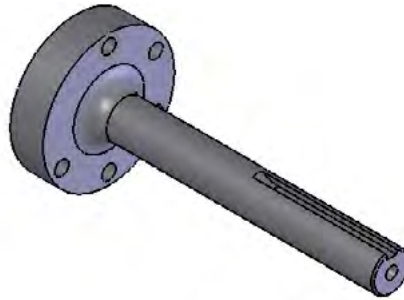
2.7 Lubrication System Assemblies

LUBRICATION SYSTEM ASSEMBLIES

PART NUMBER	DESCRIPTION OF PART	QTY.
BELT DRIVE SYSTEM ASSEMBLIES		
VRC28500A	PUMP, OIL, CYLINDER LUBE, 3/16" w/RESERVOIR	1
VRC28502A	PUMP, OIL, CYLINDER LUBE, 1/4" w/RESERVOIR	1
VRC28504A	PUMP, OIL, CYLINDER LUBE, 3/8" w/RESERVOIR	1
VRC28565A	FLANGE & INTEGRAL BEARING SHAFT ASSEMBLY *	1
* Assembly Includes: Flange, Mounting, Cylinder Lube Pump Shaft, Integral Bearing, Lube Oil Pump Ring, Retaining, Pump Shaft See section 6.1 Divider Blocks for specific divider block and pump sizes required.		

2.8 Frame Accessories

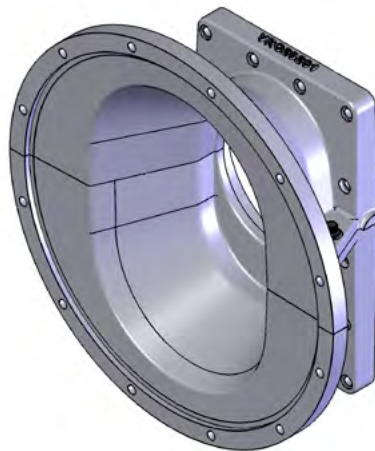
2.8.1 Stubshaft



STUBSHAFT

PART NUMBER	DESCRIPTION OF PART	QTY.
VRC21150	STUBSHAFT, ACCESSORY-END, 1 7/16"D × 12"L 3/8" KEYWAY	1
VRC25077	SCREWS, STUB SHAFT, 12 PT (Not Shown)	5

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



2.8.2 Bell Housing

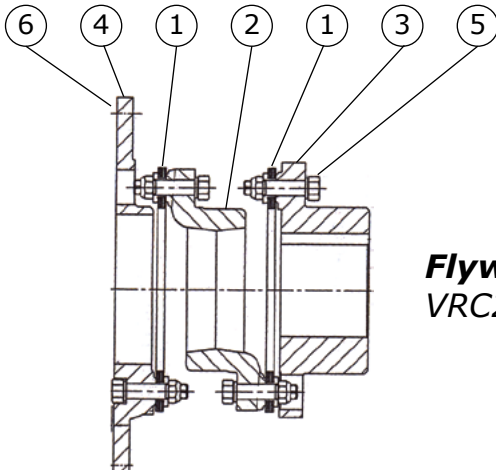
BELL HOUSING

PART NUMBER	DESCRIPTION	QTY
VRC29260A	BELL HOUSING (Purchased as an assembly)	1

Assembly includes:

- (1) Bell Housing, Top Piece
- (1) Bell Housing, Bottom Piece
- (1) Ring, Pilot, Bell Housing
- (2) Pin, Dowel, Bell Housing
- (4) Screw, Bell Housing
- (14) Screw, Bell Housing to Frame

2.8.3 Coupling Parts – Flywheel Mount

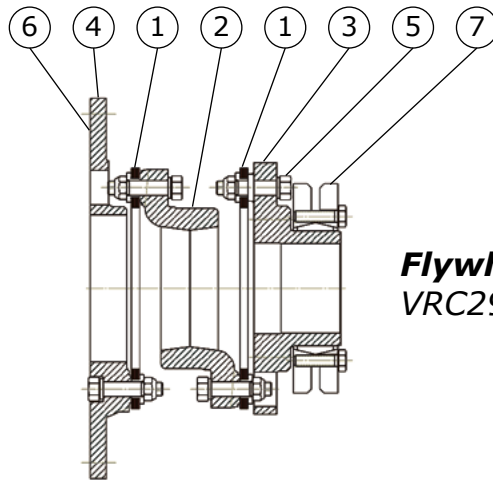


Flywheel Mount
VRC29230 or VRC29210

FLYWHEEL MOUNT

ITEM NUMBER	PART NUMBER	DESCRIPTION	QTY
Arrow Standard Issue Rexnord			
VRC29230 COUPLING, FLEX-DISC, FLYWHEEL MT., REX CMR262			1
1	VRC29231	DISC PACK, TOMALLOY TPACK, REX	2
2	VRC29232	SPACER (SPIDER), CENTER SECTION, REX	1
3	VRC29233	HUB, COMPRESSOR SHAFT, 2.88"L STANDARD, REX	1
4	VRC29234	PLATE, FLYWHEEL ADAPTOR MT., 14SAE, REX	1
5	VRC29239	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, REX (16 sets)	1
6	VRC29208	BOLT, FLYWHEEL ADAPTOR, COUPLING (Not Shown)	8
Optional TB Woods			
VRC29210 COUPLING, FLEX-DISC, FLYWHEEL MT., TB WOODS FSH26			1
1	VRC29211	DISC PACK, ALLOY STEEL, TB WOODS	2
2	VRC29212	SPACER (SPIDER), CENTER SECTION, TB WOODS	1
3	VRC29213	HUB, COMPRESSOR SHAFT, 2.38"L CUSTOM, TB WOODS	1
4	VRC29214	PLATE, FLYWHEEL ADAPTOR MT., 14SAE, TB WOODS	1
5	VRC29219	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, TB WOODS (16 sets)	1
6	VRC29208	BOLT, FLYWHEEL ADAPTOR, COUPLING (Not Shown)	8

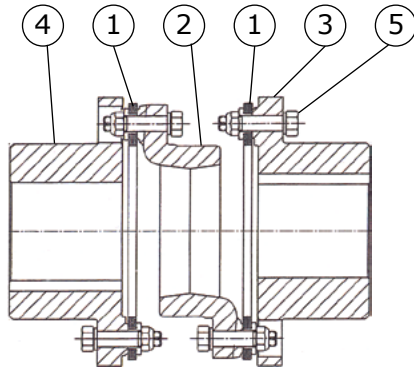
2.8.4 Coupling Parts – Flywheel Mount w/Clamp



Flywheel Mount w/Clamp
VRC29236

FLYWHEEL MOUNT w/CLAMP			
ITEM NUMBER	PART NUMBER	DESCRIPTION	QTY
Optional VRC29236 REXNORD COUPLING with CLAMP, FLEX-DISC, FLYWHEEL MT. W/CLAMP, REX CMR262			1
1	VRC29231	DISC PACK, TOMALLOY TPACK, REX	2
2	VRC29232	SPACER (SPIDER), CENTER SECTION, REX	1
3	VRC29237	HUB, COMPRESSOR SHAFT, 2.38"L, REX (used with clamp VRC29238)	1
4	VRC29234	PLATE, FLYWHEEL ADAPTOR MT., 14SAE, REX	1
5	VRC29239	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, REX (16 sets)	1
6	VRC29208	BOLT, FLYWHEEL ADAPTOR, COUPLING (Not Shown)	8
7	VRC29238	CLAMP, B-LOC, HALF SHRINK DISK TYPE HT	1

2.8.5 Coupling Parts - Electric Motor Mount



Electric Motor Mount
VRC29240

ELECTRIC MOTOR MOUNT

ITEM NUMBER	PART NUMBER	DESCRIPTION	QTY
Optional VRC29240 REXNORD COUPLING for MOTOR DRIVE, FLEX-DISC, REX AMR262			1
1	VRC29231	DISC PACK, TOMALLOY TPACK, REX	2
2	VRC29232	SPACER (SPIDER), CENTER SECTION, REX	1
3	VRC29233	HUB, COMPRESSOR SHAFT, 2.88"L STANDARD, REX	1
4	VRC29245	HUB, MOTOR MT., BLANK BORE (ID to be machined by others)	1
5	VRC29239	HARDWARE KIT: BOLTS, NUTS, AND WASHERS, REX (16 sets)	1

2.8.6 Coupling Guard

COUPLING GUARD		
PART NUMBER	DESCRIPTION	QTY
VRC29250	GUARD, COUPLING, ENGINE MT. HALF-SHELL*	1*
VRC29317	SCREW, GUARD, HEX HEAD	6
* Two are required to completely enclose the coupling.		

2.8.7 Adjustable Mounting Chock



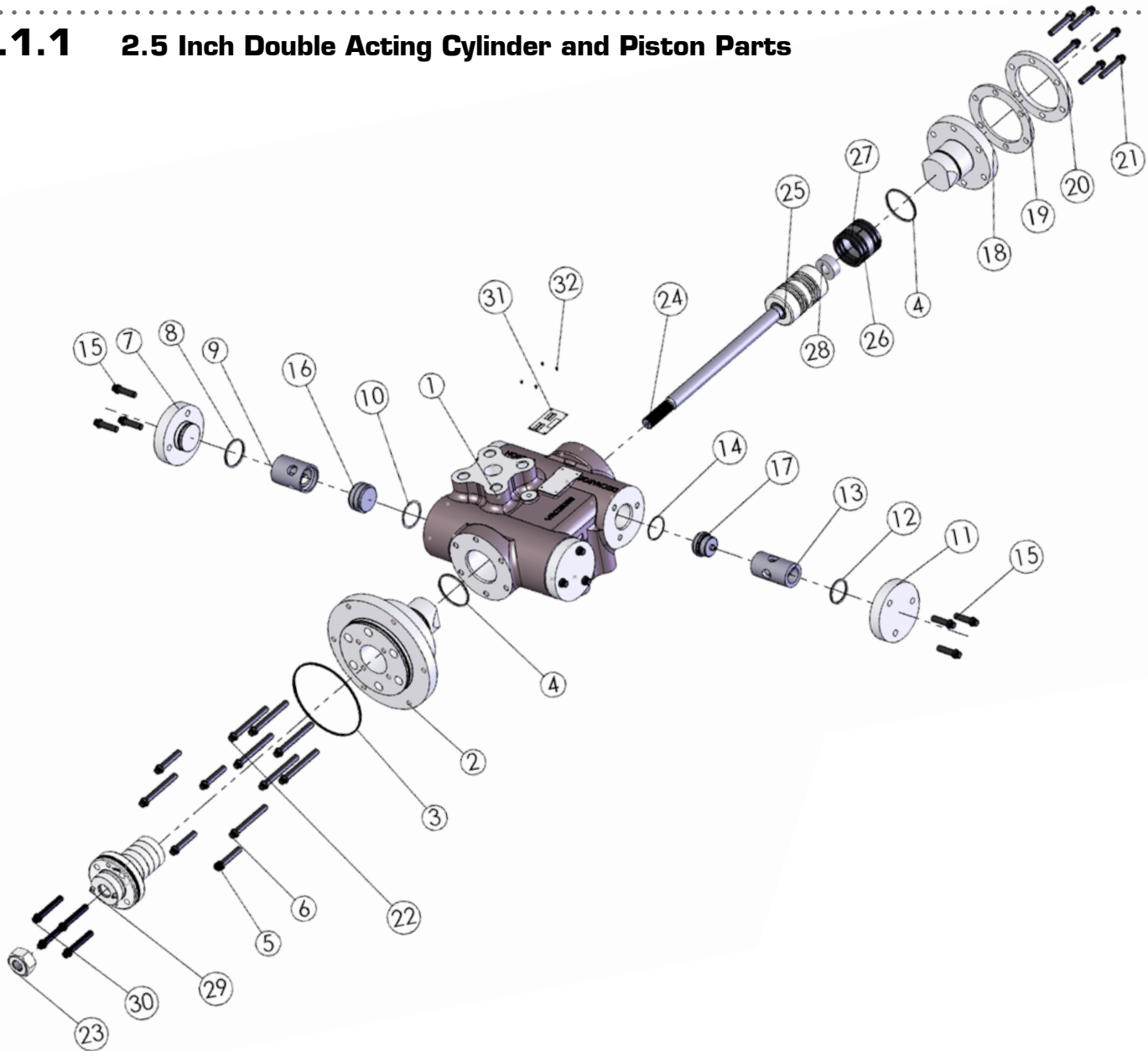
Mounting Chock
VRC29309

ADJUSTABLE MOUNTING CHOCK		
PART NUMBER	DESCRIPTION	QTY
VRC29309	CHOCK, ADJUSTABLE, ENGINE MOUNTING	4

DOUBLE ACTING CYLINDER AND PISTON - PARTS, KITS, AND ASSEMBLIES

3.1 Double Acting Cylinders and Piston Parts

3.1.1 2.5 Inch Double Acting Cylinder and Piston Parts



2.5 INCH DOUBLE ACTING CYLINDER AND PISTON

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25250A	CYLINDER, 2.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25250	CYLINDER, 2.5 INCH DA	1			
2	VRC25251	HEAD, CRANK-END, 2.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	2	1		1
4	VRC25252	O-RING, HEAD, CRANK & OUTER END, 2.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END, LONG, 12 PT	2			
7	VRC25253	COVER, VALVE, SUCTION, 2.5 - 3.0" CYLINDER	2			
8	VRC25254	O-RING, COVER, SUCTION VALVE 2.5 - 3.0" CYLINDER	2	2	2	2
9	VRC25256	RETAINER, VALVE, SUCTION, 2.5" DA & 2.25" SAHE CYLINDER	2			
10	VRC25255	GASKET, DISCHARGE VALVE SEAT, 2.5 - 3.0" CYLINDER	2	2	2	2
11	VRC25303	COVER, VALVE, DISCHARGE, 2.5 - 3.0" CYLINDER	2			
12	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.5 - 3.0" CYLINDER	2	2	2	2
13	VRC25258	RETAINER, VALVE, DISCHARGE, 2.5" DA & 2.25" SAHE CYLINDER	2			
14	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.5 - 3.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VVCP POCKET & COVER, 12 PT	12			
16	VRC26315A	VALVE, SUCTION, 2.5 - 3.0" CYLINDER MEDIUM *	2	2		2
17	VRC26325A	VALVE, DISCHARGE, 2.5 - 3.0" CYLINDER MEDIUM *	2	2		2
18	VRC27256	HEAD, OUTER-END, 2.5 INCH CYLINDER	1			
19	VRC27253	SPACER, HEAD, OUTER-END, 1/4" **	1			
20	VRC27254	SPACER, HEAD, OUTER-END, 1/2" **	2			
21	VRC25027	SCREW, CYLINDER TO FRAME, LONG & CE HEAD, 12 PT	6			
22	VRC25087	1/2"-13 X 4 1/4" HD 12PT SCREW	6			
23	VRC24909	NUT, JAM, PISTON ROD ***	1			1
24	VRC24130	ROD, PISTON, 2.5 - 3.0 INCH PISTONS	1			1
25	VRC24250	PISTON, 2.5 INCH DA CYLINDER, CI	1			1
26	VRC24251	RING, 2.5 INCH PISTON	4		4	4
27	VRC24252	BAND, RIDER, 2.5 INCH PISTON	1		1	1
28	VRC24919	NUT, PISTON	1			1
29	VRC23001A	CASE, PACKING ASSEMBLY ****	1		1	
30	VRC23107	SCREW, PACKING CASE, LONG, 12 PT	4			
31	VRC25100	NAMEPLATE, VRC CYLINDER	1			
32	VRC21606	PIN, NAMEPLATE	4			

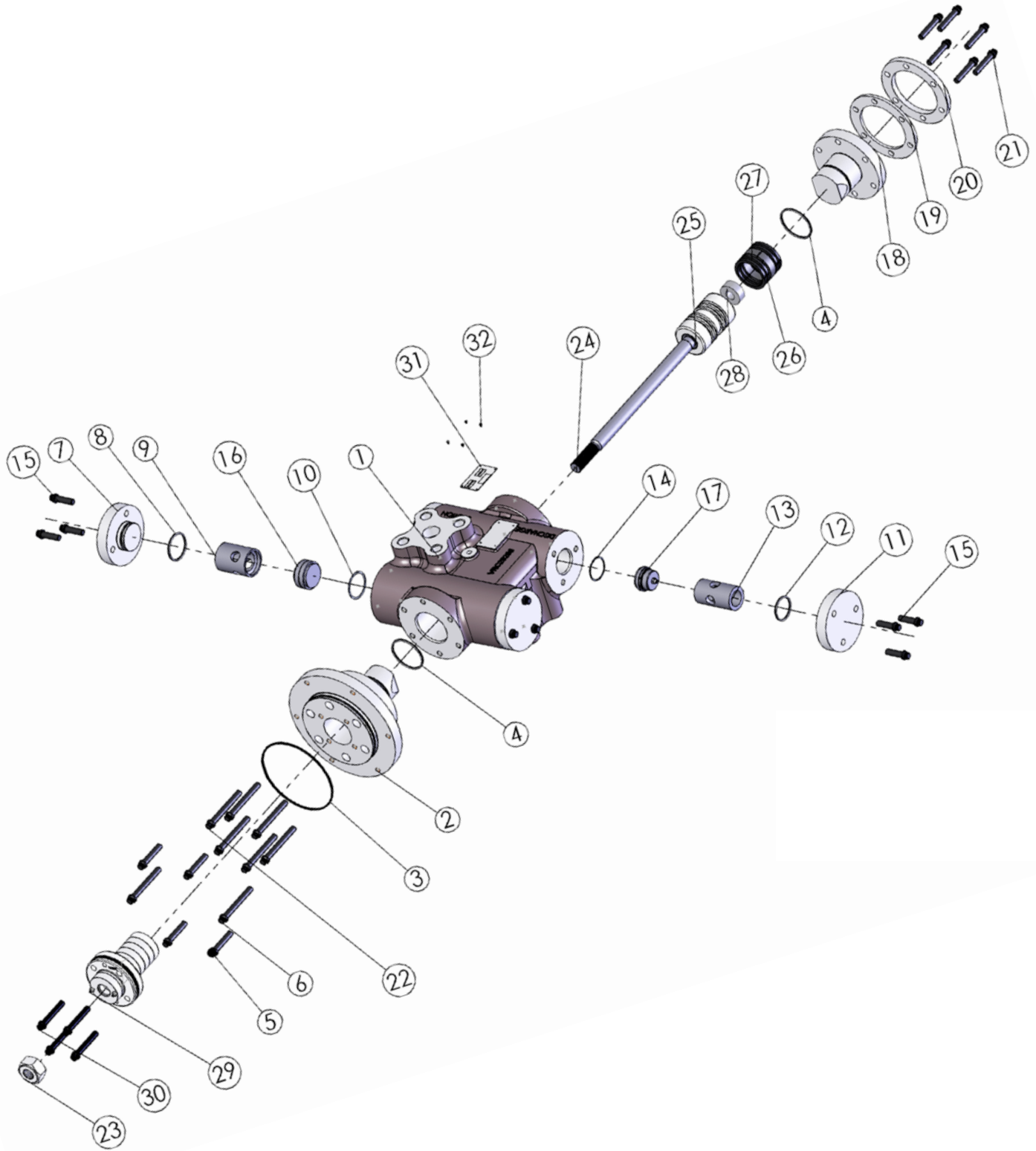
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** Spacer location inside or outside of head will be determined by site conditions. Second spacer not shown.

*** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

**** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.2 3.0 Inch Double Acting Cylinder and Piston Parts



3.0 INCH DOUBLE ACTING CYLINDER AND PISTON

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25300A	CYLINDER, 3.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25300	CYLINDER, 3.0 INCH DA	1			
2	VRC25301	HEAD, CRANK-END, 3.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25302	O-RING, HEAD, CRANK & OUTER END, 3.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END, LONG, 12 PT	2			
7	VRC25253	COVER, VALVE, SUCTION, 2.5 - 3.0" CYLINDER	2			
8	VRC25254	O-RING, COVER, SUCTION VALVE 2.5 - 3.0" CYLINDER	2	2	2	2
9	VRC25306	RETAINER, VALVE, SUCTION, 3.0" CYLINDER	2			
10	VRC25255	GASKET, SUCTION VALVE SEAT, 2.5 - 3.0" CYLINDER	2	2	2	2
11	VRC25303	COVER, VALVE, DISCHARGE, 2.5 - 3.0" CYLINDER	2			
12	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.5 - 3.0" CYLINDER	2	2	2	2
13	VRC25308	RETAINER, VALVE, DISCHARGE, 3.0" CYLINDER	2			
14	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.5 - 3.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VVCP POCKET & COVER, 12 PT	12			
16	VRC26315A	VALVE, SUCTION, 2.5 - 3.0" CYLINDER MEDIUM *	2	2		2
17	VRC26325A	VALVE, DISCHARGE, 2.5 - 3.0" CYLINDER MEDIUM *	2	2		2
18	VRC27306	HEAD, OUTER-END, 3.0 INCH CYLINDER	1			
19	VRC27253	SPACER, HEAD, OUTER-END, 1/4" **	1			
20	VRC27254	SPACER, HEAD, OUTER-END, 1/2" **	2			
21	VRC25027	SCREW, CYLINDER TO FRAME, LONG & CE HEAD, 12 PT	6			
22	VRC25087	1/2"-13 X 4 1/4" HD 12PT SCREW	6			
23	VRC24909	NUT, JAM, PISTON ROD ***	1			1
24	VRC24130	ROD, PISTON, 2.5 - 3.0 INCH PISTONS	1			1
25	VRC24300	PISTON, 3.0 INCH DA CYLINDER, CI	1			1
26	VRC24301	RING, 3.0 INCH PISTON	4		4	4
27	VRC24302	BAND, RIDER, 3.0 INCH PISTON	1		1	1
28	VRC24919	NUT, PISTON	1			1
29	VRC23001A	CASE, PACKING ASSEMBLY ****	1		1	
30	VRC23107	SCREW, PACKING CASE, 12 PT	4			
31	VRC25100	NAMEPLATE, VRC CYLINDER	1			
32	VRC21606	PIN, NAMEPLATE	4			

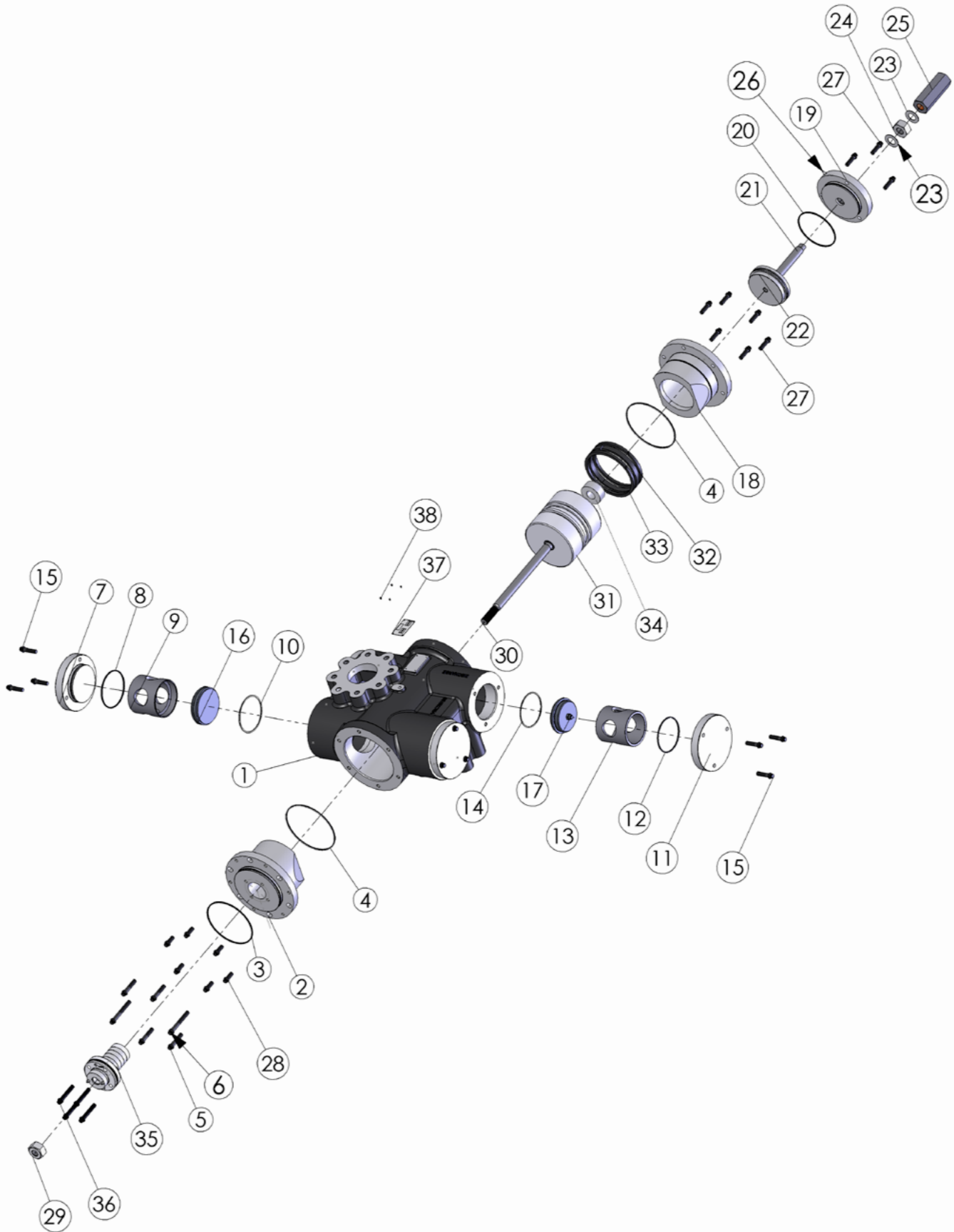
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** Spacer location inside or outside of head will be determined by site conditions. Second spacer not shown.

*** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

**** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.3 3.5 Inch Double Acting Cylinder and Piston Parts



3.5 INCH DOUBLE ACTING CYLINDER AND PISTON

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25350A	CYLINDER, 3.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25350	CYLINDER, 3.5 INCH DA	1			
2	VRC25351	HEAD, CRANK END, 3.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25352	O-RING, HEAD, CRANK & OUTER END, 3.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	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" CYLINDER	2	2	2	2
9	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA & 3.5" SAHE CYLINDER	2			
10	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
11	VRC25403	COVER, VALVE, DISCHARGE, 3.5"-4.0" CYLINDER	2			
12	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
13	VRC25358	RETAINER, VALVE, DISCHARGE, 3.5" CYLINDER	2			
14	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26415A	VALVE, SUCTION, 3.5 - 4.0" CYLINDER MEDIUM *	2	2		2
17	VRC26425A	VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER MEDIUM *	2	2		2
18	VRC27351	POCKET, OUTER HEAD, 3.5" VVCP	1			
19	VRC27353	COVER, POCKET, 3.5 - 4.0" VVCP	1			
20	VRC27354	O-RING, POCKET COVER, 3.5" - 4.0" VVCP	1	1	1	1
21	VRC27357A	PISTON & STEM ASSEMBLY, 3.5" - 4.0" VVCP	1			
22	VRC27358	RING, PISTON, 3.5" - 4.0" VVCP	1			1
23	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
25	VRC27101	COVER, VVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, VVCP	1			
27	VRC25017	SCREW, VVCP POCKET AND COVER, 12 PT	9			
28	VRC25047	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC24140	ROD, PISTON, 3.5 - 4.0 INCH PISTONS	1			1
31	VRC24350	PISTON, 3.5 INCH DA CYLINDER, CI	1			1
32	VRC24351	RING, 3.5 INCH PISTON	4		4	4
33	VRC24352	BAND, RIDER, 3.5 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

4.0 INCH DOUBLE ACTING CYLINDER AND PISTON

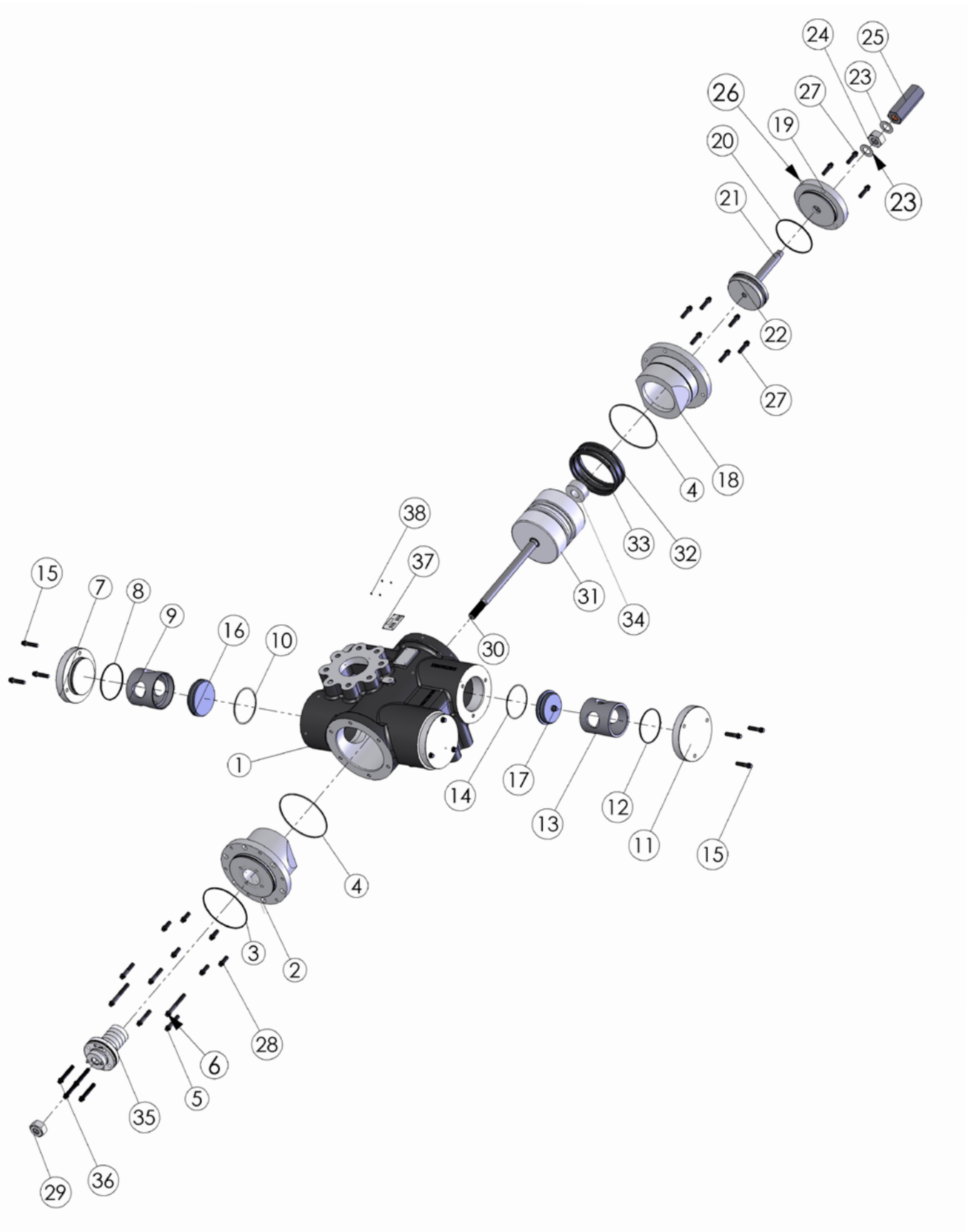
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25400A	CYLINDER, 4.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25400	CYLINDER, 4.0 INCH DA	1			
2	VRC25401	HEAD, CRANK END, 4.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25402	O-RING, HEAD, CRANK & OUTER END, 4.0 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	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" CYLINDER	2	2	2	2
9	VRC25406	RETAINER, VALVE, SUCTION, 4.0" CYLINDER	2			
10	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
11	VRC25403	COVER, VALVE, DISCHARGE, 3.5" - 4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
12	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	2			
13	VRC25408	RETAINER, VALVE, DISCHARGE, 4.0" CYLINDER	2			
14	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26415A	VALVE, SUCTION, 3.5 - 4.0" CYLINDER MEDIUM *	2	2		2
17	VRC26425A	VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER MEDIUM *	2	2		2
18	VRC27401	POCKET, OUTER HEAD, 4.0" VVCP	1			
19	VRC27353	COVER, POCKET, 3.5 - 4.0" VVCP	1			
20	VRC27354	O-RING, POCKET COVER, 3.5" - 4.0" VVCP	1	1	1	1
21	VRC27357A	PISTON & STEM ASSEMBLY, 3.5" - 4.0" VVCP	1			
22	VRC27358	RING, PISTON, 3.5" - 4.0" VVCP	1			1
23	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
25	VRC27101	COVER, VVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, VVCP	1			
27	VRC25017	SCREW, VVCP POCKET AND COVER, 12 PT	9			
28	VRC25047	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC24140	ROD, PISTON, 3.5 - 4.0 INCH PISTONS	1			1
31	VRC24400	PISTON, 4.0 INCH DA CYLINDER, CI	1			
32	VRC24401	RING, 4.0 INCH PISTON	4		4	4
33	VRC24402	BAND, RIDER, 4.0 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.5 4.5 Inch Double Acting Cylinder and Piston Parts



4.5 INCH DOUBLE ACTING CYLINDER AND PISTON

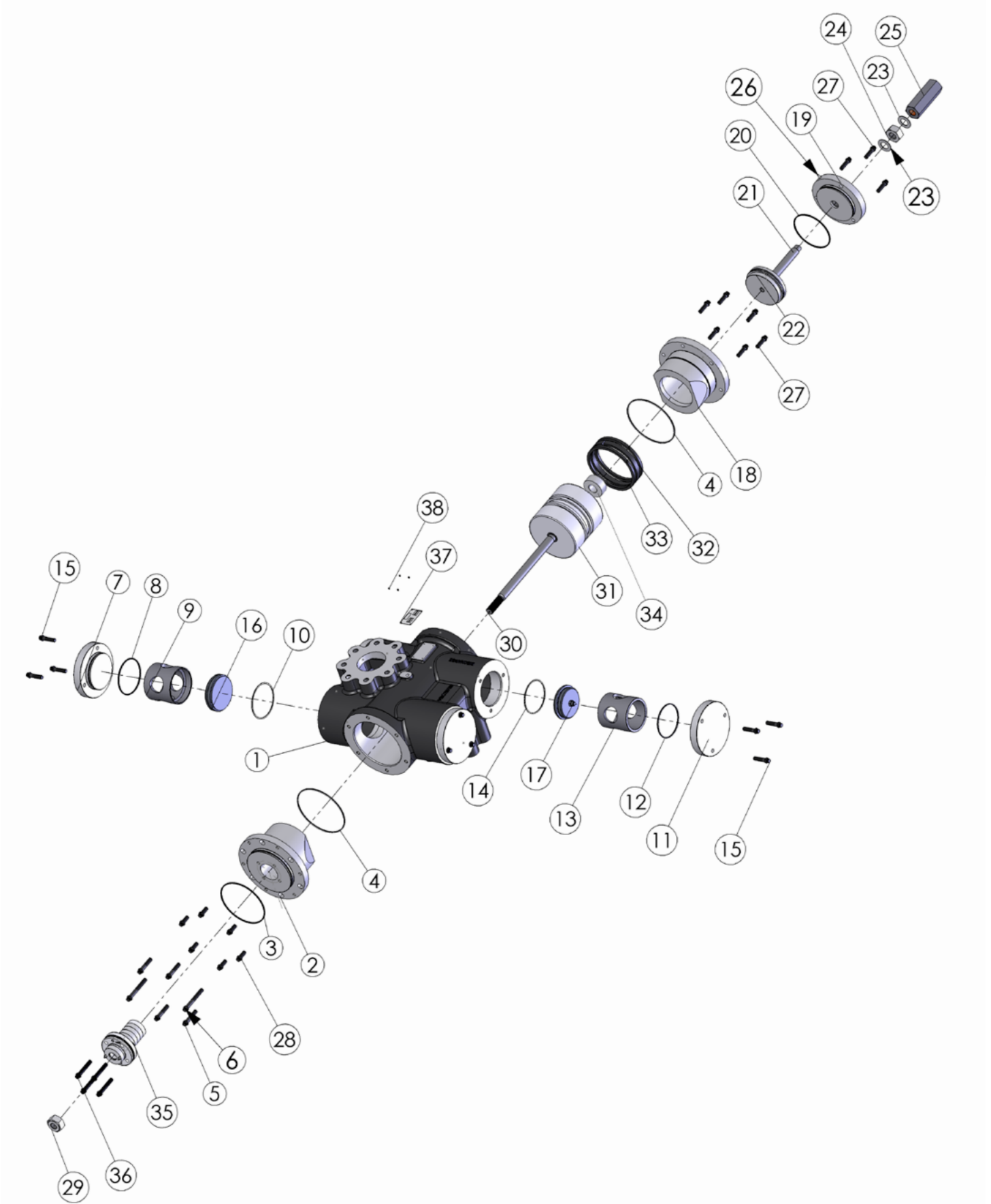
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25450A	CYLINDER, 4.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25450	CYLINDER 4.5 INCH, DA	1			
2	VRC25451	HEAD, CRANK END, 4.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25452	O-RING, HEAD, CRANK & OUTER END, 4.5 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25047	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
9	VRC25456	RETAINER, VALVE, SUCTION, 4.5" CYLINDER	2			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
11	VRC25503	COVER, VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER	2			
12	VRC25504	O-RING, COVER, DISCHARGE VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25458	RETAINER, VALVE, DISCHARGE, 4.5" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26515A	VALVE, SUCTION 4.5 - 5.0" CYL MEDIUM *	2	2		2
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	2	2		2
18	VRC27451	POCKET, OUTER HEAD, 4.5" VVCP	1			
19	VRC27453	COVER, POCKET, 4.5" - 5.0" VVCP	1			
20	VRC27454	O-RING, POCKET COVER, 4.5" - 5.0" VVCP	1	1	1	1
21	VRC27457A	PISTON & STEM ASSEMBLY, 4.5" - 5.0" VVCP	1			
22	VRC27458	RING, PISTON, 4.5" - 5.0" VVCP	1			1
23	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
25	VRC27101	COVER, VVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, VVCP	1			
27	VRC25017	SCREW, VVCP POCKET AND COVER, 12 PT	9			
28	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD**	1			
30	VRC24150	ROD, PISTON, 4.5 - 5.0" INCH PISTONS	1			
31A	VRC24450	PISTON, 4.5 INCH DA CYLINDER, CI	1			1
31B	VRC24455	PISTON, 4.5 INCH DA CYLINDER, AL	1			
32	VRC24451	RING, 4.5 INCH PISTON	4		4	4
33	VRC24452	BAND, RIDER, 4.5 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.6 5.0 Inch Double Acting Cylinder and Piston Parts



5.0 INCH DOUBLE ACTING CYLINDER AND PISTON

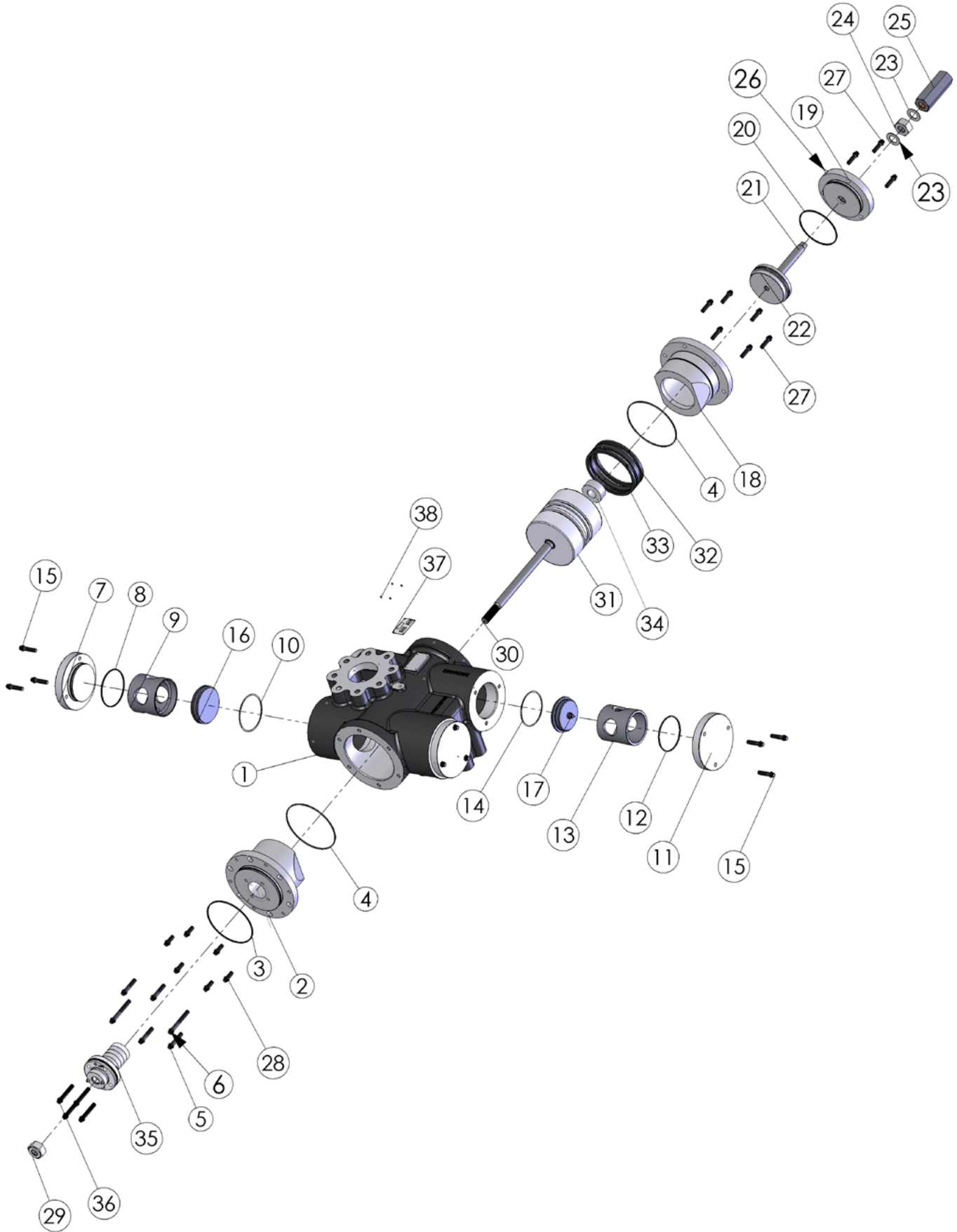
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25500A	CYLINDER, 5.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25500	CYLINDER 5.0 INCH, DA	1			
2	VRC25501	HEAD, CRANK END, 5.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25502	O-RING, HEAD, CRANK & OUTER END, 5.0 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
9	VRC25506	RETAINER, VALVE, SUCTION, 5.0" CYLINDER	2			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
11	VRC25503	COVER, VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER	2			
12	VRC25504	O-RING, COVER, DISCHARGE VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25508	RETAINER, VALVE, DISCHARGE, 5.0" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26515A	VALVE, SUCTION 4.5 - 5.0" CYL MEDIUM *	2	2		2
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	2	2		2
18	VRC27501	POCKET, OUTER HEAD, 5.0" WVCP	1			
19	VRC27453	COVER, POCKET, 4.5 - 5.0" WVCP	1			
20	VRC27454	O-RING, POCKET COVER, 4.5 - 5.0" WVCP	1	1	1	1
21	VRC27457A	PISTON & STEM ASSEMBLY, 4.5 - 5.0" WVCP	1			
22	VRC27458	RING, PISTON, 4.5 - 5.0" WVCP	1			1
23	VRC27105	GASKET, WVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, WVCP ADJUSTING STEM	1			
25	VRC27101	COVER, WVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, WVCP	1			
27	VRC25017	SCREW, WVCP POCKET AND COVER, 12 PT	9			
28	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC24150	ROD, PISTON, 4.5 - 5.0 INCH PISTONS	1			1
31A	VRC24500	PISTON, 5.0 INCH DA CYLINDER, CI	1			1
31B	VRC24505	PISTON, 5.0 INCH DA CYLINDER, AL	1			1
32	VRC24501	RING, 5.0 INCH PISTON	4		4	4
33	VRC24502	BAND, RIDER, 5.0 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1		1	
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.7 5.5 Inch Double Acting Cylinder and Piston Parts



5.5 INCH DOUBLE ACTING CYLINDER AND PISTON

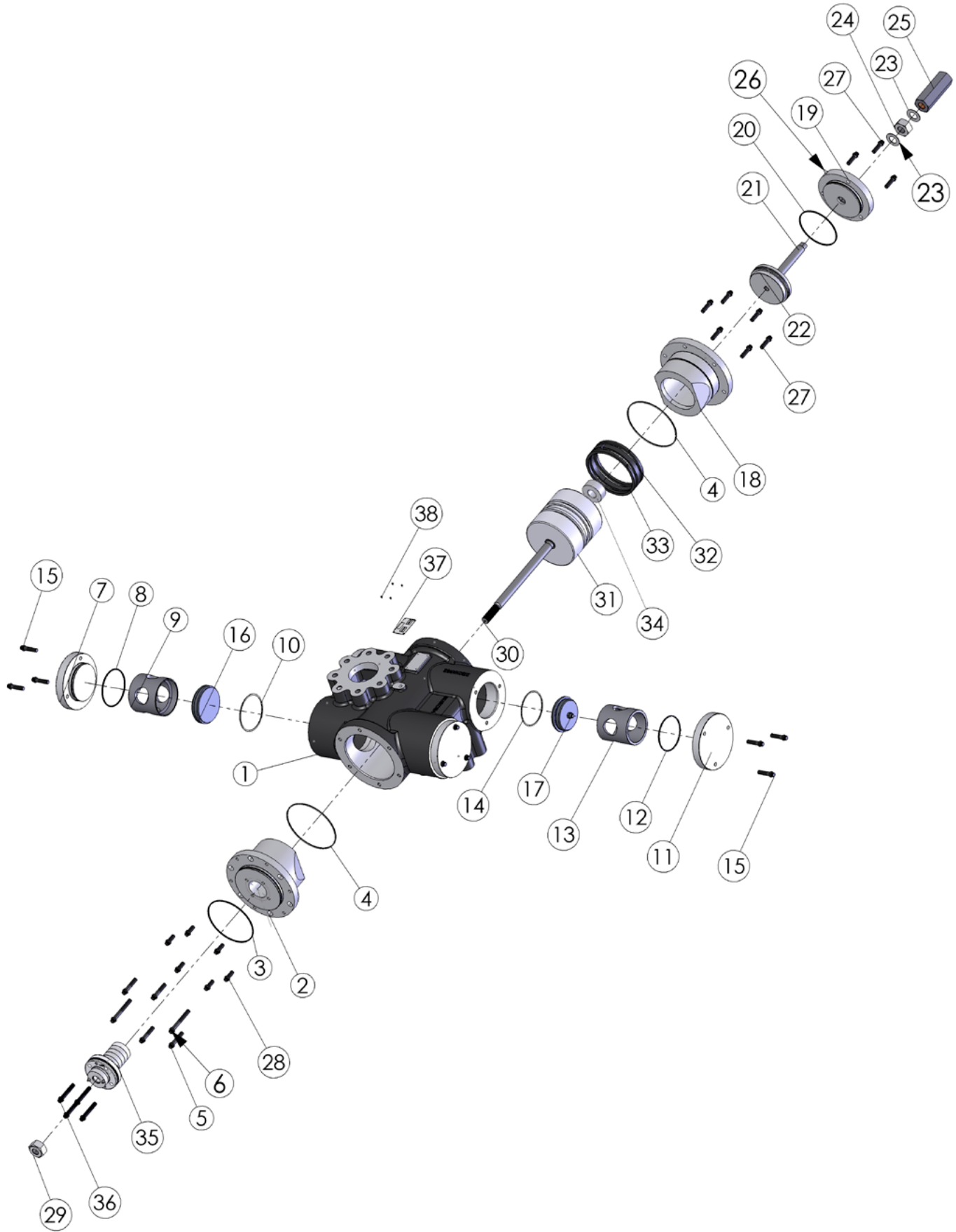
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25550A	CYLINDER, 5.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25550	CYLINDER 5.5 INCH, DA	1			
2	VRC25551	HEAD, CRANK END, 5.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1			1
4	VRC25552	O-RING, HEAD, CRANK & OUTER END, 5.5 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25553	COVER, VALVE, SUCTION, 5.5 - 6.0" CYLINDER	2			
8	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
9	VRC25556	RETAINER, VALVE, SUCTION, 5.5" CYLINDER	2			
10	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5 - 6.0" CYLINDER	2	2	2	2
11	VRC25603	COVER, VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER	2			
12	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
13	VRC25558	RETAINER, VALVE, DISCHARGE, 5.5" CYLINDER	2			
14	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5 - 6.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26615A	VALVE, SUCTION 5.5 - 6.0" CYL MEDIUM *	2	2		2
17	VRC26625A	VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER MEDIUM *	2	2		2
18	VRC27551	POCKET, OUTER HEAD, 5.5" WVCP	1			
19	VRC27553	COVER, POCKET, 5.5" - 6.0" WVCP	1			
20	VRC27554	O-RING, POCKET COVER, 5.5" - 6.0" WVCP	1	1	1	1
21	VRC27557A	PISTON & STEM ASSEMBLY, 5.5" - 6.0" WVCP	1			
22	VRC27558	RING, PISTON, 5.5" - 6.0" WVCP	1			1
23	VRC27105	GASKET, WVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, WVCP ADJUSTING STEM	1			
25	VRC27101	COVER, WVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, WVCP	1			
27	VRC25017	SCREW, WVCP POCKET AND COVER, 12 PT	9			
28	VRC25077	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC24160	ROD, PISTON, 5.5 - 6.0 INCH PISTONS	1			1
31	VRC24550	PISTON, 5.5 INCH DA CYLINDER, AL	1			1
32	VRC24551	RING, 5.5 INCH PISTON	2		2	2
33	VRC24552	BAND, RIDER, 5.5 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.8 6.0 Inch Double Acting Cylinder and Piston Parts



6.0 INCH DOUBLE ACTING CYLINDER AND PISTON

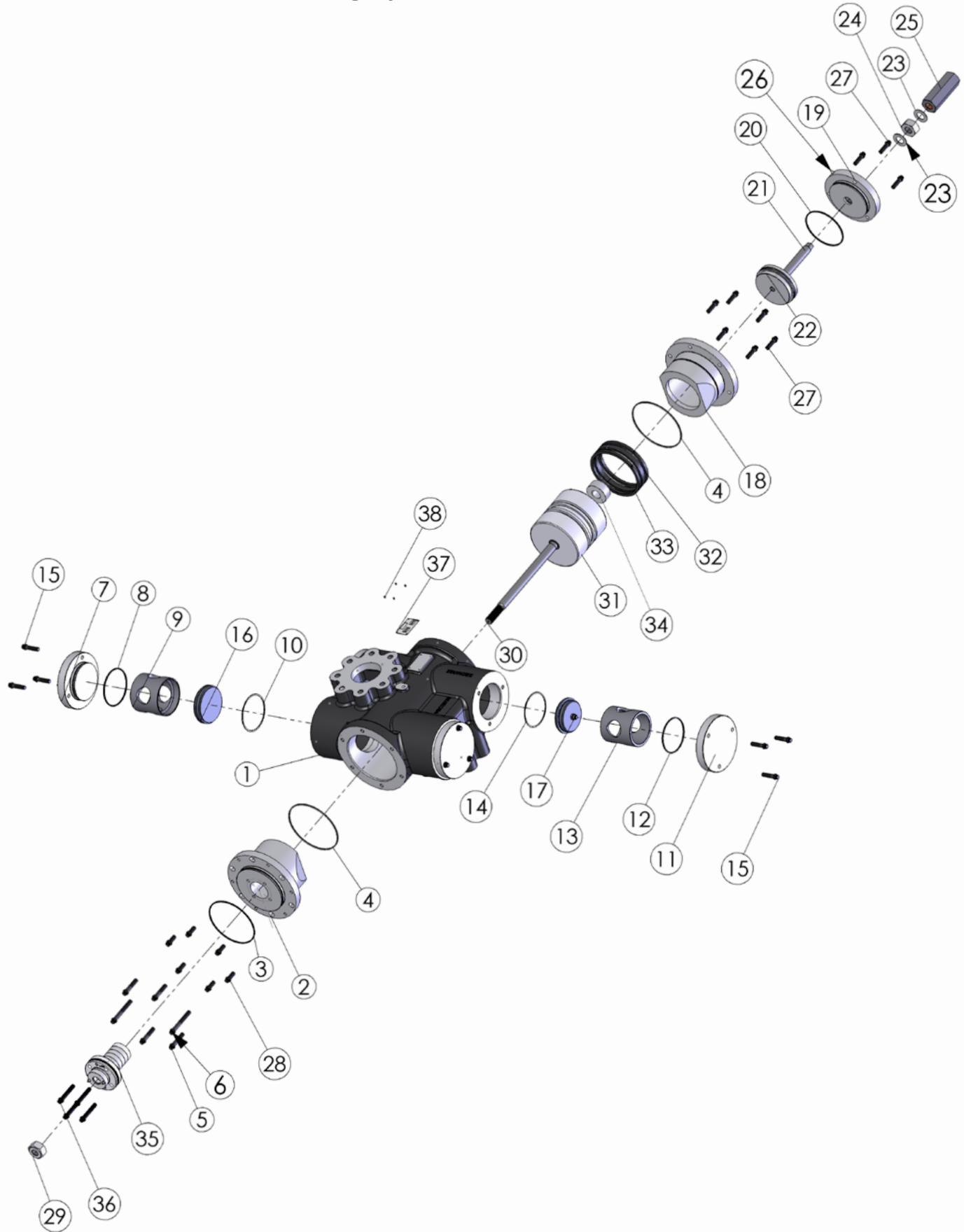
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25600A	CYLINDER, 6.0 INCH DA, VRC COMPRESSOR ASSEMBLY				
1	VRC25600	CYLINDER 6.0 INCH, DA	1			
2	VRC25601	HEAD, CRANK END, 6.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25602	O-RING, HEAD, CRANK & OUTER END, 6.0 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25553	COVER, VALVE, SUCTION, 5.5 - 6.0" CYLINDER	2			
8	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
9	VRC25606	RETAINER, VALVE, SUCTION, 6.0" CYLINDER	2			
10	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5 - 6.0" CYLINDER	2	2	2	2
11	VRC25603	COVER, VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER	2			
12	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
13	VRC25608	RETAINER, VALVE, DISCHARGE, 6.0" CYLINDER	2			
14	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5 - 6.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26615A	VALVE, SUCTION 5.5 - 6.0" CYL MEDIUM *	2	2		2
17	VRC26625A	VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER MEDIUM *	2	2		2
18	VRC27601	POCKET, OUTER HEAD, 6.0" VVCP	1			
19	VRC27553	COVER, POCKET, 5.5 - 6.0" VVCP	1			
20	VRC27554	O-RING, POCKET COVER, 5.5 - 6.0" VVCP	1	1	1	1
21	VRC27557A	PISTON & STEM ASSEMBLY, 5.5 - 6.0" VVCP	1			
22	VRC27558	RING, PISTON, 5.5 - 6.0" VVCP	1			1
23	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
25	VRC27101	COVER, VVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, VVCP	1			
27	VRC25017	SCREW, VVCP POCKET AND COVER, 12 PT	9			
28	VRC25077	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC 24160	ROD, PISTON, 5.5 - 6.0" INCH PISTONS	1			1
31	VRC24600	PISTON, 6.0 INCH DA CYLINDER, AL	1			1
32	VRC24601	RING, 6.0 INCH PISTON	2		2	2
33	VRC24602	BAND, RIDER, 6.0 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.9 6.5 Inch Double Acting Cylinder and Piston Parts



6.5 INCH DOUBLE ACTING CYLINDER AND PISTON

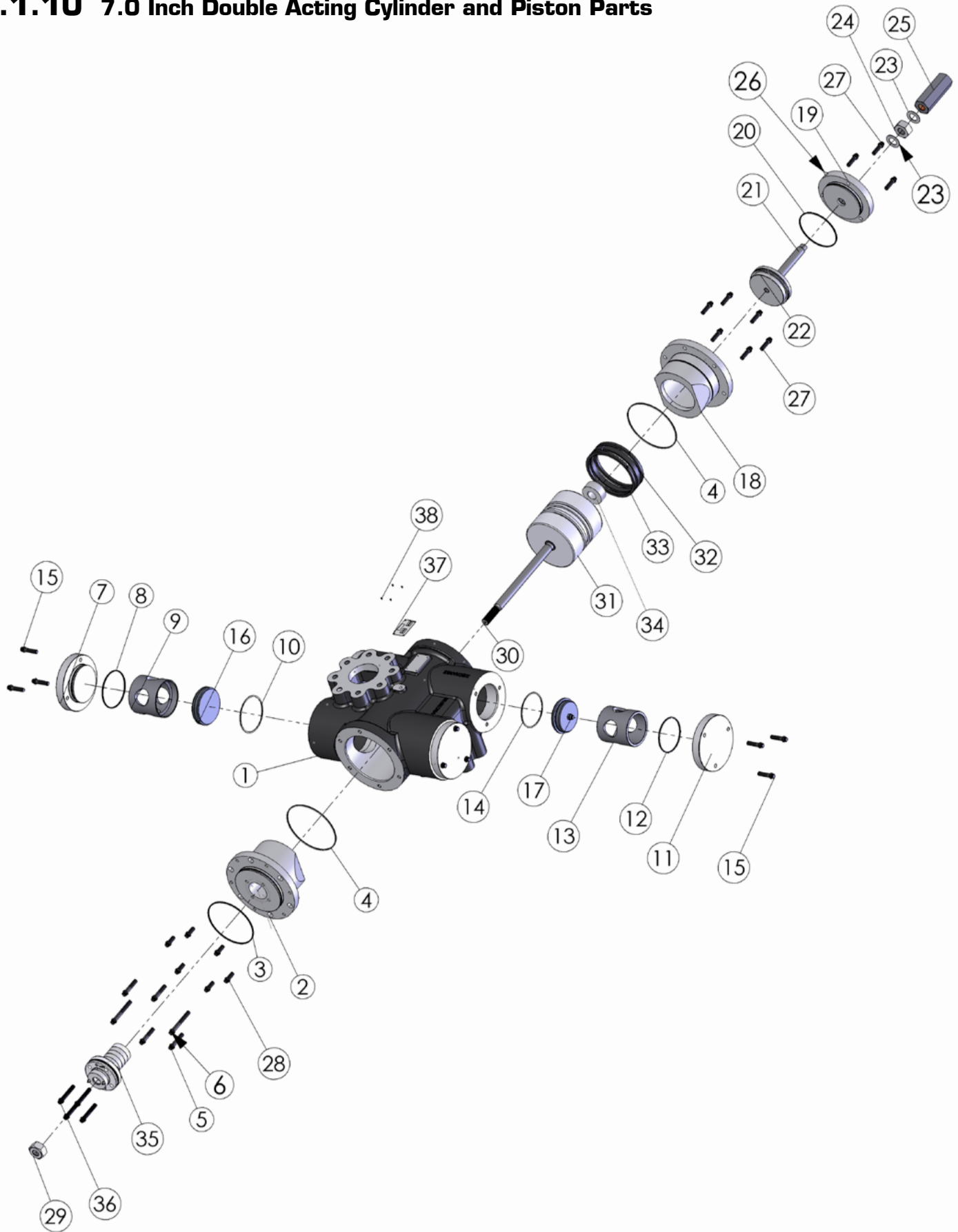
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25650A	CYLINDER, 6.5 INCH DA, VRC COMPRESSOR ASSEMBLY				
1	VRC25650	CYLINDER 6.5 INCH, DA	1			
2	VRC25651	HEAD, CRANK END, 6.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25652	O-RING, HEAD, CRANK & OUTER END, 6.5 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25656	RETAINER, VALVE, SUCTION, 6.5" CYLINDER	2			
10	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2			
12	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
13	VRC25658	RETAINER, VALVE, DISCHARGE, 6.5" CYLINDER	2			
14	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26715A	VALVE, SUCTION 6.5 - 7.0" CYLINDER MEDIUM *	2	2		2
17	VRC26725A	VALVE, DISCHARGE, 6.5 - 7.0" CYLINDER MEDIUM *	2	2		2
18	VRC27651	POCKET, OUTER HEAD, 6.5" WVCP	1			
19	VRC27653	COVER, POCKET, 6.5 - 7.0" WVCP	1			
20	VRC25654	O-RING, POCKET COVER, 6.5 - 7.0" WVCP	1	1	1	1
21	VRC27657A	PISTON & STEM ASSEMBLY, 6.5 - 7.0" WVCP	1			
22	VRC27658	RING, PISTON, 6.5 - 7.0" WVCP	1			1
23	VRC27105	GASKET, WVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, WVCP ADJUSTING STEM	1			
25	VRC27101	COVER, WVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, WVCP	1			
27	VRC25017	SCREW, WVCP POCKET AND COVER, 12 PT	9			
28	VRC25067	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC24180	ROD, PISTON, 6.5 - 8.0 INCH PISTONS	1			1
31	VRC24650	PISTON, 6.5 INCH DA CYLINDER, AL	1			1
32	VRC24651	RING, 6.5 INCH PISTON	2		2	2
33	VRC24652	BAND, RIDER, 6.5 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1		1	
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1			
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.10 7.0 Inch Double Acting Cylinder and Piston Parts



7.0 INCH DOUBLE ACTING CYLINDER AND PISTON

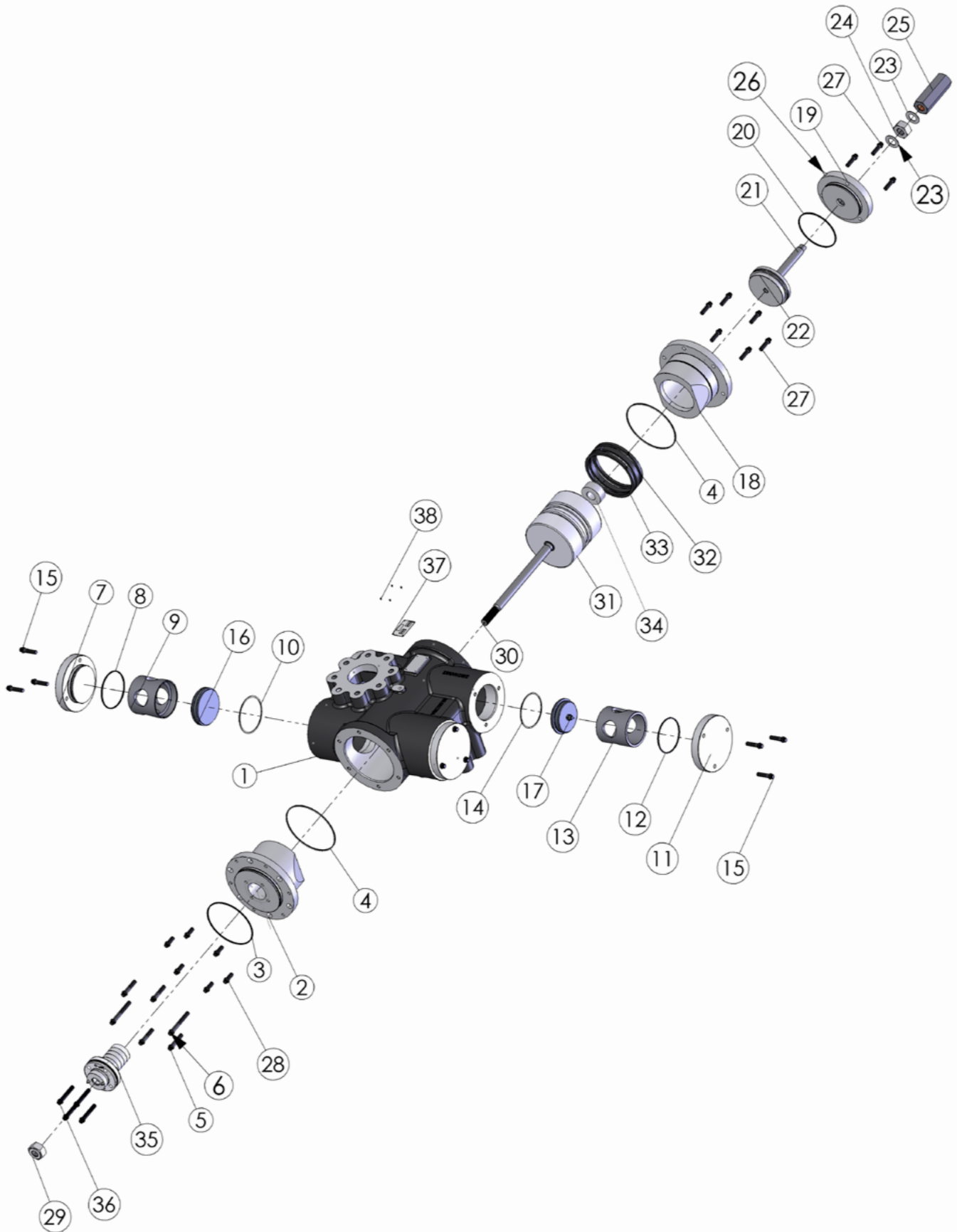
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25700A	CYLINDER, 7.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25700	CYLINDER 7.0 INCH, DA	1			
2	VRC25701	HEAD, CRANK END, 7.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25702	O-RING, HEAD, CRANK & OUTER END 7.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25706	RETAINER, VALVE, SUCTION, 7.0" CYLINDER	2			
10	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2			
12	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
13	VRC25708	RETAINER, VALVE, DISCHARGE, 7.0" CYLINDER	2			
14	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26715A	VALVE, SUCTION 6.5 - 7.0" CYL MEDIUM *	2	2		2
17	VRC26725A	VALVE, DISCHARGE, 6.5 - 7.0" CYLINDER MEDIUM *	2	2		2
18	VRC27701	POCKET, OUTER HEAD, 7.0" VVCP	1			
19	VRC27653	COVER, POCKET, 6.5" - 7.0" VVCP	1			
20	VRC25654	O-RING, POCKET COVER, 6.5" - 7.0" VVCP	1	1	1	1
21	VRC27657A	PISTON & STEM ASSEMBLY, 6.5" - 7.0" VVCP	1			
22	VRC27658	RING, PISTON, 6.5" - 7.0" VVCP	1			1
23	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
25	VRC27101	COVER, VVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, VVCP	1			
27	VRC25017	SCREW, VVCP POCKET AND COVER, 12 PT	9			
28	VRC25067	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC24180	ROD, PISTON, 6.5 - 8.0 INCH PISTONS	1			1
31	VRC24700	PISTON, 7.0 INCH DA CYLINDER, AL	1			1
32	VRC24701	RING, 7.0 INCH PISTON	2		2	2
33	VRC24702	BAND, RIDER, 7.0 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.11 7.5 Inch Double Acting Cylinder and Piston Parts



7.5 INCH DOUBLE ACTING CYLINDER AND PISTON

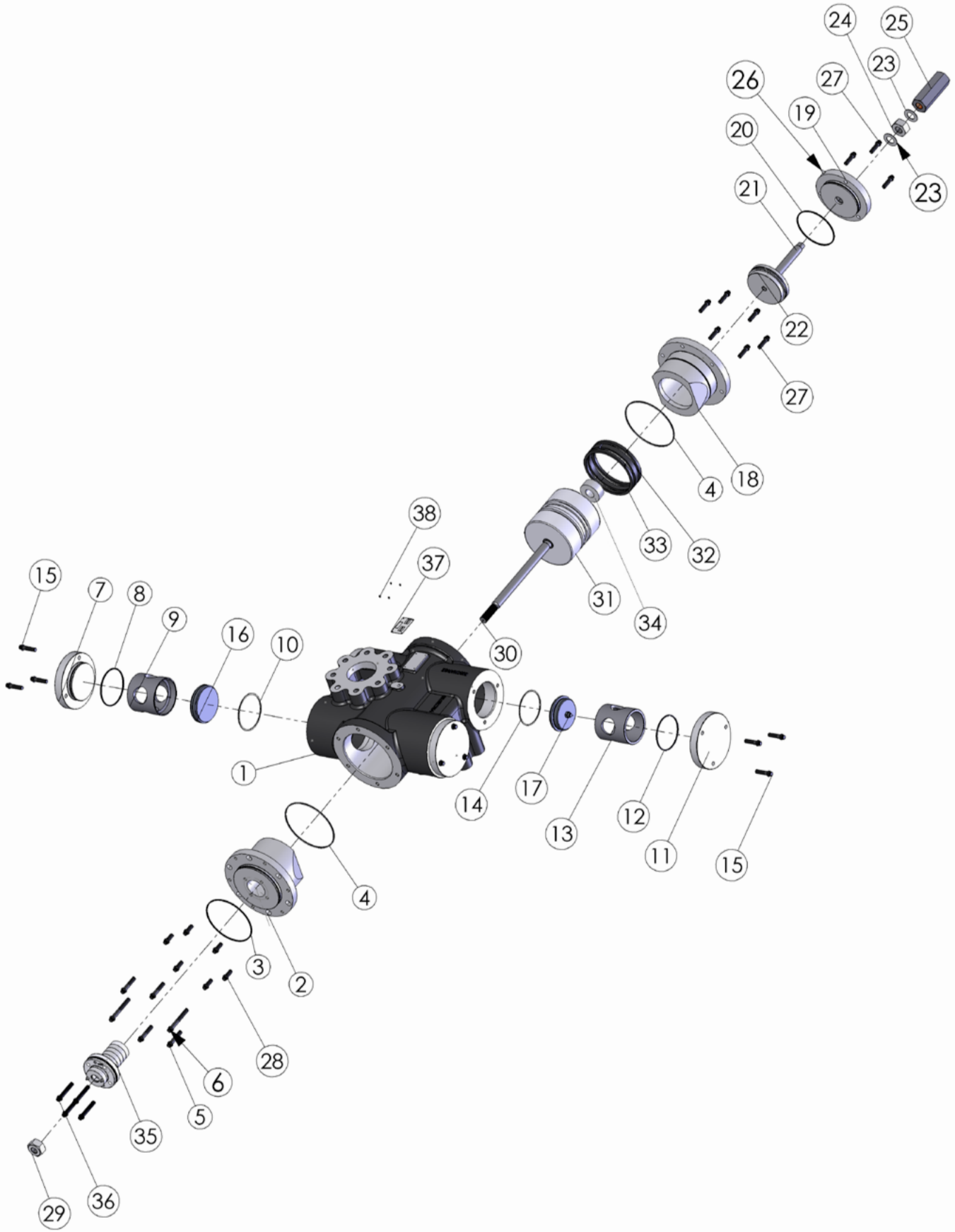
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25750A	CYLINDER, 7.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25750	CYLINDER 7.5 INCH, DA	1			
2	VRC25751	HEAD, CRANK END, 7.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25752	O-RING, HEAD, CRANK & OUTER END, 7.5 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25756	RETAINER, VALVE, SUCTION, 7.5" CYLINDER	2			
10	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2			
12	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
13	VRC25758	RETAINER, VALVE, DISCHARGE, 7.5" CYLINDER	2			
14	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26815A	VALVE, SUCTION 7.5 - 8.0" CYL MEDIUM *	2	2		2
17	VRC26825A	VALVE, DISCHARGE, 7.5 - 8.0" CYLINDER MEDIUM *	2	2		2
18	VRC27751	POCKET, OUTER HEAD, 7.5" VVCP	1			
19	VRC27753	COVER, POCKET, 7.5" - 8.0" VVCP	1			
20	VRC27754	O-RING, POCKET COVER, 7.5" - 8.0" VVCP	1	1	1	1
21	VRC27757A	PISTON & STEM ASSEMBLY, 7.5" - 8.0" VVCP	1			
22	VRC27758	RING, PISTON, 7.5" - 8.0" VVCP	1			2
23	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
25	VRC27101	COVER, VVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, VVCP	1			
27	VRC25017	SCREW, VVCP POCKET AND COVER, 12 PT	9			
28	VRC25067	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			
30	VRC24180	ROD, PISTON, 6.5 - 8.0 INCH PISTONS	1			1
31	VRC24750	PISTON, 7.5 INCH DA CYLINDER, AL	1			1
32	VRC24751	RING, 7.5 INCH PISTON	2		2	2
33	VRC24752	BAND, RIDER, 7.5 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

3.1.12 8.0 Inch Double Acting Cylinder and Piston Parts



8.0 INCH DOUBLE ACTING CYLINDER AND PISTON

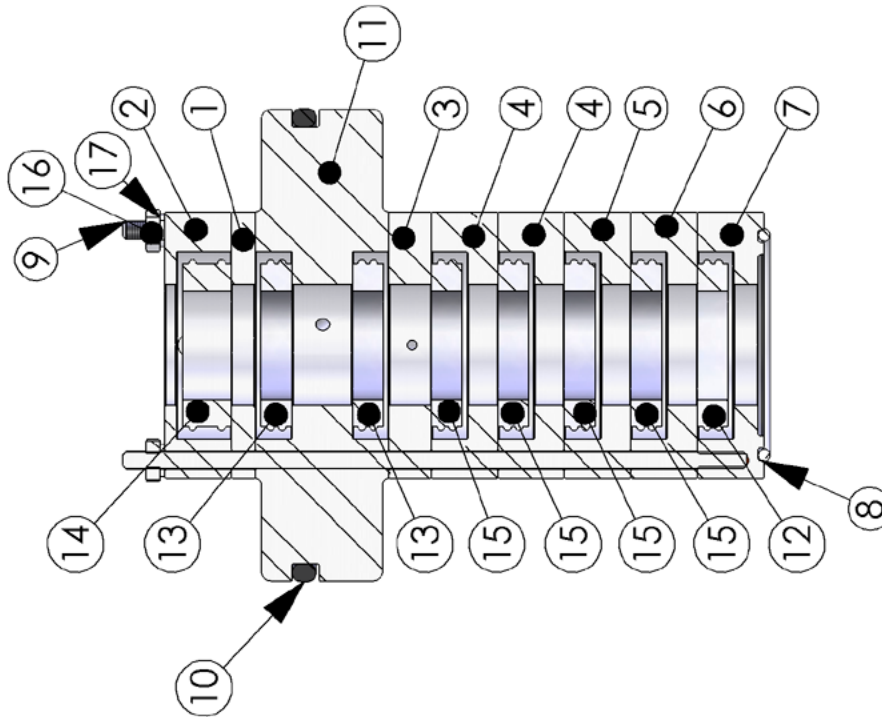
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25800A	CYLINDER, 8.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1			
1	VRC25800	CYLINDER 8.0 INCH, DA	1			
2	VRC25801	HEAD, CRANK END, 8.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25802	O-RING, HEAD, CRANK & OUTER END, 8.0 INCH CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, HEAD, CRANK-END LONG, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25806	RETAINER, VALVE, SUCTION, 8.0" CYLINDER	2			
10	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2			
12	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
13	VRC25808	RETAINER, VALVE, DISCHARGE, 8.0" CYLINDER	2			
14	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	12			
16	VRC26815A	VALVE, SUCTION, 7.5 - 8.0" CYLINDER MEDIUM *	2	2		2
17	VRC26825A	VALVE, DISCHARGE, 7.5 - 8.0" CYLINDER MEDIUM *	2	2		2
18	VRC27801	POCKET, OUTER HEAD, 8.0" VVCP	1			
19	VRC27753	COVER, POCKET, 7.5" - 8.0" VVCP	1			
20	VRC27754	O-RING, POCKET COVER, 7.5" - 8.0" VVCP	1	1	1	1
21	VRC27757A	PISTON & STEM ASSEMBLY, 7.5" - 8.0" VVCP	1			
22	VRC27758	RING, PISTON, 7.5" - 8.0" VVCP	1			1
23	VRC27105	GASKET, VVCP ADJUSTING STEM COVER	2			2
24	VRC27103	NUT, JAM, VVCP ADJUSTING STEM	1			
25	VRC27101	COVER, VVCP ADJUSTING STEM	1			
26	VRC27109	ZERK, GREASE, VVCP	1			
27	VRC25017	SCREW, VVCP POCKET AND COVER, 12 PT	9			
28	VRC 25067	SCREW, HEAD, CRANK-END, 12 PT	6			
29	VRC24909	NUT, JAM, PISTON ROD **	1			1
30	VRC24180	ROD, PISTON, 6.5 - 8.0 INCH PISTONS	1			1
31	VRC24800	PISTON, 8.0 INCH DA CYLINDER, AL	1			1
32	VRC24801	RING, 8.0 INCH PISTON	2		2	2
33	VRC24802	BAND, RIDER, 8.0 INCH PISTON	1		1	1
34	VRC24919	NUT, PISTON	1			1
35	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
36	VRC23107	SCREW, PACKING CASE, 12 PT	4			
37	VRC25100	NAMEPLATE, VRC CYLINDER	1			
38	VRC21606	PIN, NAMEPLATE	4			

* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 3.2.1.

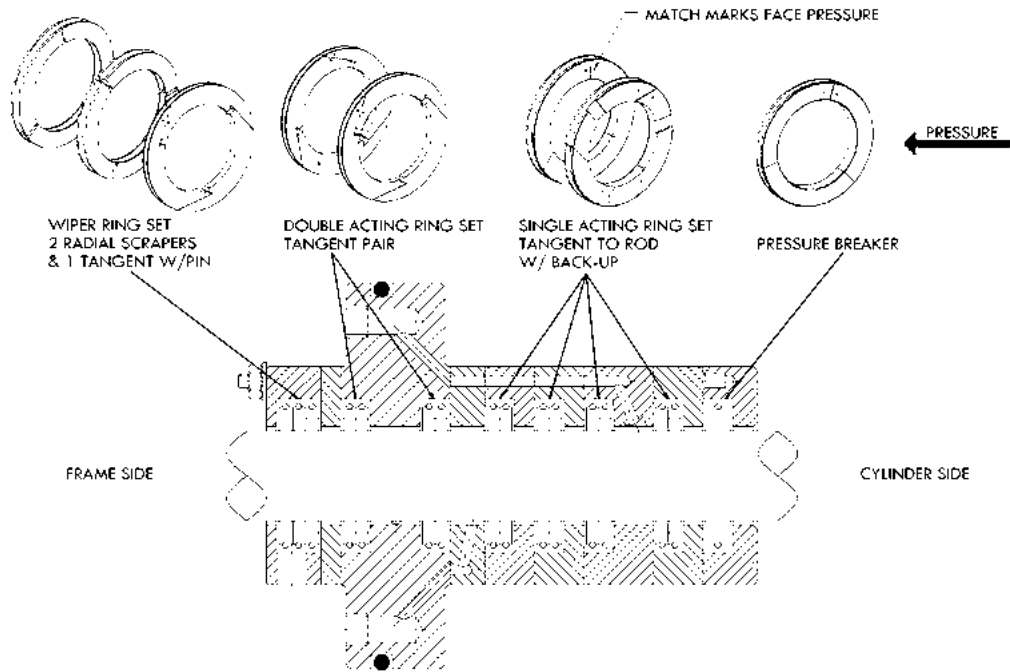
3.2 Pressure Packing, Piston Rod for Double Acting Cylinders



PISTON ROD PACKING CASE

NUMBER	PART NUMBER	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

3.2.1 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 NUMBER	DESCRIPTION OF PART	QTY.
VRC23001A	CASE, PACKING ASSEMBLY , COMPLETE	1
VRC23501	RING KIT, PACKING RENEWAL W/PARTS INCLUDE: O-RING, NOSE GASKET, NUTS AND WASHERS	1 (Kit)
VRC23551	RING KIT, PACKING RENEWAL RINGS ONLY	1 (Kit)

3.3 Cylinder O-Ring & Gasket Kits – Double Acting Cylinders

CYLINDER O-RING & GASKET KITS - DOUBLE ACTING

PART NUMBER	DESCRIPTION OF PART	QTY.
VRC25250K	O-RING & GASKET KIT, 2.5 INCH DOUBLE ACTING CYLINDER	1
VRC25300K	O-RING & GASKET KIT, 3.0 INCH DOUBLE ACTING CYLINDER	1
VRC25350K	O-RING & GASKET KIT, 3.5 INCH DOUBLE ACTING CYLINDER	1
VRC25400K	O-RING & GASKET KIT, 4.0 INCH DOUBLE ACTING CYLINDER	1
VRC25450K	O-RING & GASKET KIT, 4.5 INCH DOUBLE ACTING CYLINDER	1
VRC25500K	O-RING & GASKET KIT, 5.0 INCH DOUBLE ACTING CYLINDER	1
VRC25550K	O-RING & GASKET KIT, 5.5 INCH DOUBLE ACTING CYLINDER	1
VRC25600K	O-RING & GASKET KIT, 6.0 INCH DOUBLE ACTING CYLINDER	1
VRC25650K	O-RING & GASKET KIT, 6.5 INCH DOUBLE ACTING CYLINDER	1
VRC25700K	O-RING & GASKET KIT, 7.0 INCH DOUBLE ACTING CYLINDER	1
VRC25750K	O-RING & GASKET KIT, 7.5 INCH DOUBLE ACTING CYLINDER	1
VRC25800K	O-RING & GASKET KIT, 8.0 INCH DOUBLE ACTING CYLINDER	1

All Double Acting Cylinder O-Rings and Gasket Kits include:

- 2 - O-Rings, Head, Crank & Outer End
- 1 - O-Ring, Head, Crank-End to Frame
- 2 - O-Rings, Cover, SUCTION Valve
- 2 - O-Rings, Cover, DISCHARGE Valve
- 2 - Gasket, SUCTION Valve Seat
- 2 - Gasket, DISCHARGE Valve Seat

3.4 Double Acting Cylinder and Piston/Rod Assemblies

3.4.1 VVCP Piston and Stem Assemblies

VVCP PISTON & STEM ASSEMBLIES		
PART NUMBER	DESCRIPTION OF PART	QTY.
VRC27357A	PISTON & STEM ASSEMBLY, 3.5" - 4.0" VVCP	1
VRC27457A	PISTON & STEM ASSEMBLY, 4.5" - 5.0" VVCP	1
VRC27557A	PISTON & STEM ASSEMBLY, 5.5" - 6.0" VVCP	1
VRC27657A	PISTON & STEM ASSEMBLY, 6.5" - 7.0" VVCP	1
VRC27757A	PISTON & STEM ASSEMBLY, 7.5" - 8.0" VVCP	1
VVCP, Piston and Stem Assembly includes: VVCP Adjusting Stem Piston and Piston Ring * Spring Pin		
* Piston size is determined by VVCP size.		

3.4.2 Double Acting Cylinder and Piston/Rod Assemblies

DOUBLE ACTING CYLINDER & PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)		
PART NUMBER	DESCRIPTION OF PART	QTY.
DOUBLE ACTING CYLINDERS		
2.5 AND 3.0 INCH DOUBLE ACTING CYLINDER AND PISTON / ROD		
VRC25250A	CYLINDER, 2.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24250A-CI	PISTON & ROD ASSEMBLY, 2.5" DA CYLINDER, CI (9.78#)	1
VRC25300A	CYLINDER, 3.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24300A	PISTON & ROD ASSEMBLY, 3.0" DA CYLINDER, CI (12.29#)	1
3.5 AND 4.0 INCH DOUBLE ACTING CYLINDER AND PISTON / ROD		
VRC25350A	CYLINDER, 3.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24350A-CI	PISTON & ROD ASSEMBLY, 3.5" DA CYLINDER, CI (16.91#)	1
VRC25400A	CYLINDER, 4.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24400A-CI	PISTON & ROD ASSEMBLY, 4.0" DA CYLINDER, CI (20.79#)	1
4.5 AND 5.0 INCH DOUBLE ACTING CYLINDER AND PISTON / ROD		
VRC25450A	CYLINDER, 4.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24450A-CI	PISTON & ROD ASSEMBLY, 4.5" DA CYLINDER, CI (27.20#)	1
VRC24455A-AL	PISTON & ROD ASSEMBLY, 4.5" DA CYLINDER, AL (14.63#)	1
VRC25500A	CYLINDER, 5.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24500A-CI	PISTON & ROD ASSEMBLY, 5.0" DA CYLINDER, CI (37.79#)	1
VRC24505A-AL	PISTON & ROD ASSEMBLY, 5.0" CYLINDER, AL (16.76#)	1
NOTE: CI indicates Cast Iron. AL indicates Aluminum.		
All Piston/Rod Assemblies include:		
Piston		
Piston Rod		
Piston Rings		
Rider Band		
Piston Nut		
Piston Rod Jam Nut (Standard)*		
*A heavier jam nut may be used if required for balancing. See Section 3.4.3.		

DOUBLE ACTING CYLINDER & PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)

PART NUMBER	DESCRIPTION OF PART	QTY.
5.5 AND 6.0 INCH DOUBLE ACTING CYLINDER AND PISTON / ROD		
VRC25550A	CYLINDER, 5.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24550A-AL	PISTON & ROD ASSEMBLY, 5.5" DA CYLINDER, AL (19.72#)	1
VRC25600A	CYLINDER, 6.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24600A-AL	PISTON & ROD ASSEMBLY, 6.0" DA CYLINDER, AL (22.46#)	1
6.5 AND 7.0 INCH DOUBLE ACTING CYLINDER AND PISTON / ROD		
VRC25650A	CYLINDER, 6.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24650A-AL	PISTON & ROD ASSEMBLY, 6.5" DA CYLINDER, AL (27.47#)	1
VRC25700A	CYLINDER, 7.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24700A-AL	PISTON & ROD ASSEMBLY, 7.0" DA CYLINDER, AL (31.08#)	1
7.5 AND 8.0 INCH DOUBLE ACTING CYLINDER AND PISTON / ROD		
VRC25750A	CYLINDER, 7.5 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24750A-AL	PISTON & ROD ASSEMBLY, 7.5" DA CYLINDER, AL (34.86#)	1
VRC25800A	CYLINDER, 8.0 INCH DA, VRC COMPRESSOR ASSEMBLY	1
VRC24800A-AL	PISTON & ROD ASSEMBLY, 8.0" DA CYLINDER, AL (38.89#)	1
<p>All Piston/Rod Assemblies include:</p> <ul style="list-style-type: none"> Piston Piston Rod Piston Rings Rider Band Piston Nut Piston Rod Jam Nut (Standard)* 		
<p>*A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p>		

3.4.3 Piston Rod Jam Nuts Used For Balancing

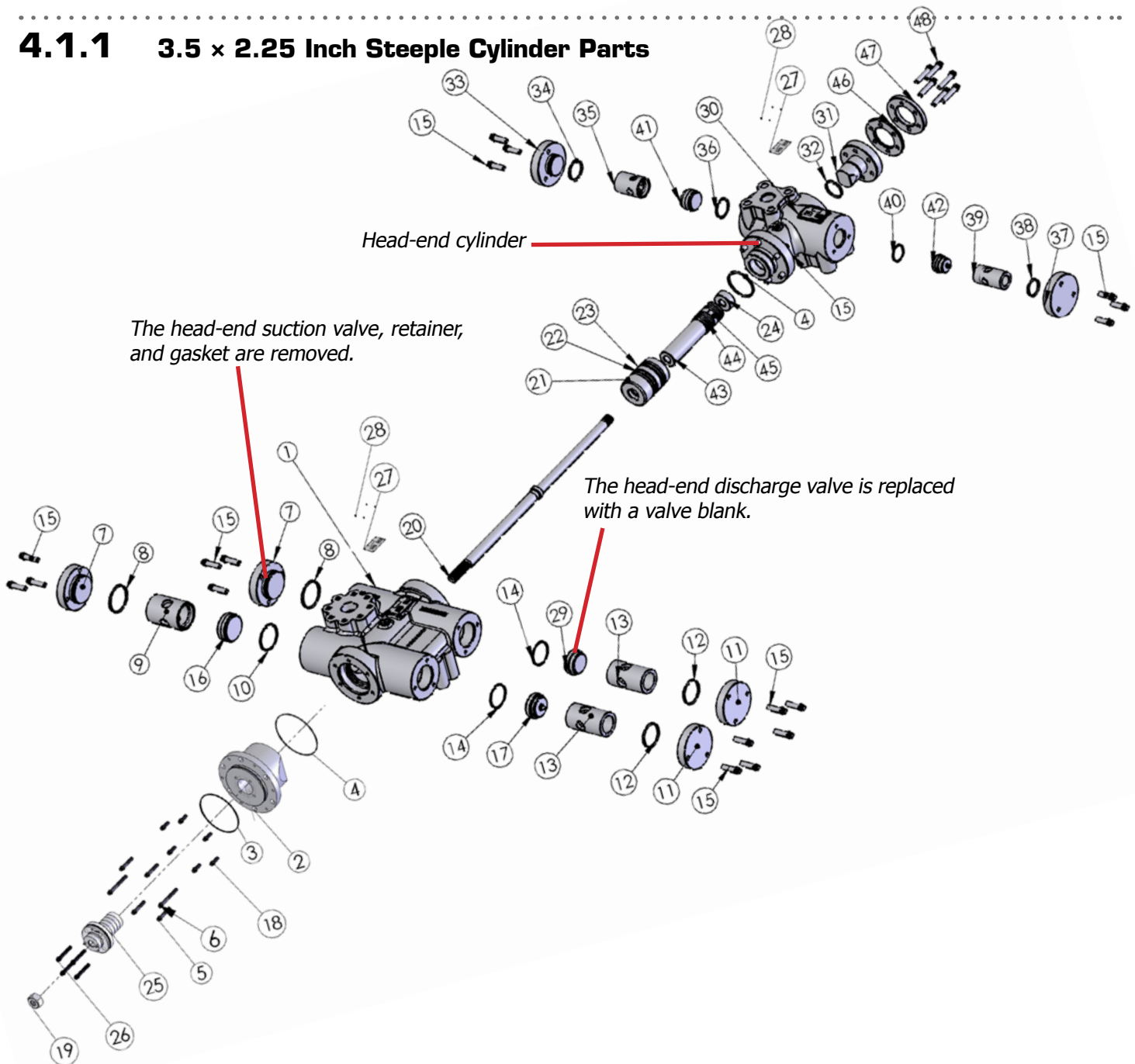
Piston Rod Jam Nuts Used For Balancing (Reciprocating Weight)

PART NUMBER	DESCRIPTION OF PART	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
<p>*Nut requires piston jam nut bar tool VRC29499</p>		

STEEPLE CYLINDER AND PISTON - PARTS, KITS, AND ASSEMBLIES

4.1 Steeple Cylinder and Piston Parts

4.1.1 3.5 x 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.

3.5 × 2.25 STEEPLE CYLINDER

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25121A	CYLINDER, STEEPLE, 2.25" SAHE × 3.5" SACE, ASSEMBLY				
1	VRC25350	CYLINDER, 3.5 INCH DA	1			
2	VRC25351	HEAD, CRANK END, 3.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25352	O-RING, HEAD, CRANK & OUTER END, 3.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	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 INCH CYLINDER	2	2	2	2
9	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA & 3.5" SAHE CYLINDER	1			
10	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER	1	1	1	1
11	VRC25403	COVER, VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER	2			
12	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5 - 4.0" CYLINDER	2	2	2	2
13	VRC25358	RETAINER, VALVE, DISCHARGE, 3.5" CYLINDER	2			
14	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26415A	VALVE, SUCTION, 3.5 - 4.0" CYLINDER MEDIUM*	1	1		1
17	VRC26425A	VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER MEDIUM*	1	1		1
18	VRC25047	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24112	ROD, PISTON, 2.25" SAHE × 3.5-4.0" SACE	1			1
21	VRC24359	PISTON, 3.5 INCH SACE STEEPLE CYLINDER, CI	1			1
22	VRC24351	RING, 3.5 INCH PISTON	4		4	4
23	VRC24352	BAND, RIDER, 3.5 INCH PISTON	1		1	1
24	VRC24911	NUT, PISTON, 2.25" SAHE STEEPLE	1		1	
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1			
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26499	BLANK, VALVE, DISCHARGE 3.5 - 4.0" SACE CYLINDER	1			
30	VRC25121	CYLINDER, STEEPLE, 2.25" SAHE × 3.5" SACE	1			
31	VRC27121	HEAD, 2.25" SAHE CYLINDER	1			
32	VRC27124	O-RING, HEAD, CRANK-END, 2.25" SAHE CYLINDER	1	1	1	1
33	VRC25253	COVER, VALVE, SUCTION, 2.5-3.0" 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, 2.5-3.0" CYL	1			
38	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1

3.5 × 2.25 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
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" & 2.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26025A	VALVE, DISCHARGE, 2.25" & 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 INCH PISTON	4		4	4
45	VRC24212	BAND, RIDER, 2.25 INCH 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, 12 PT	6			

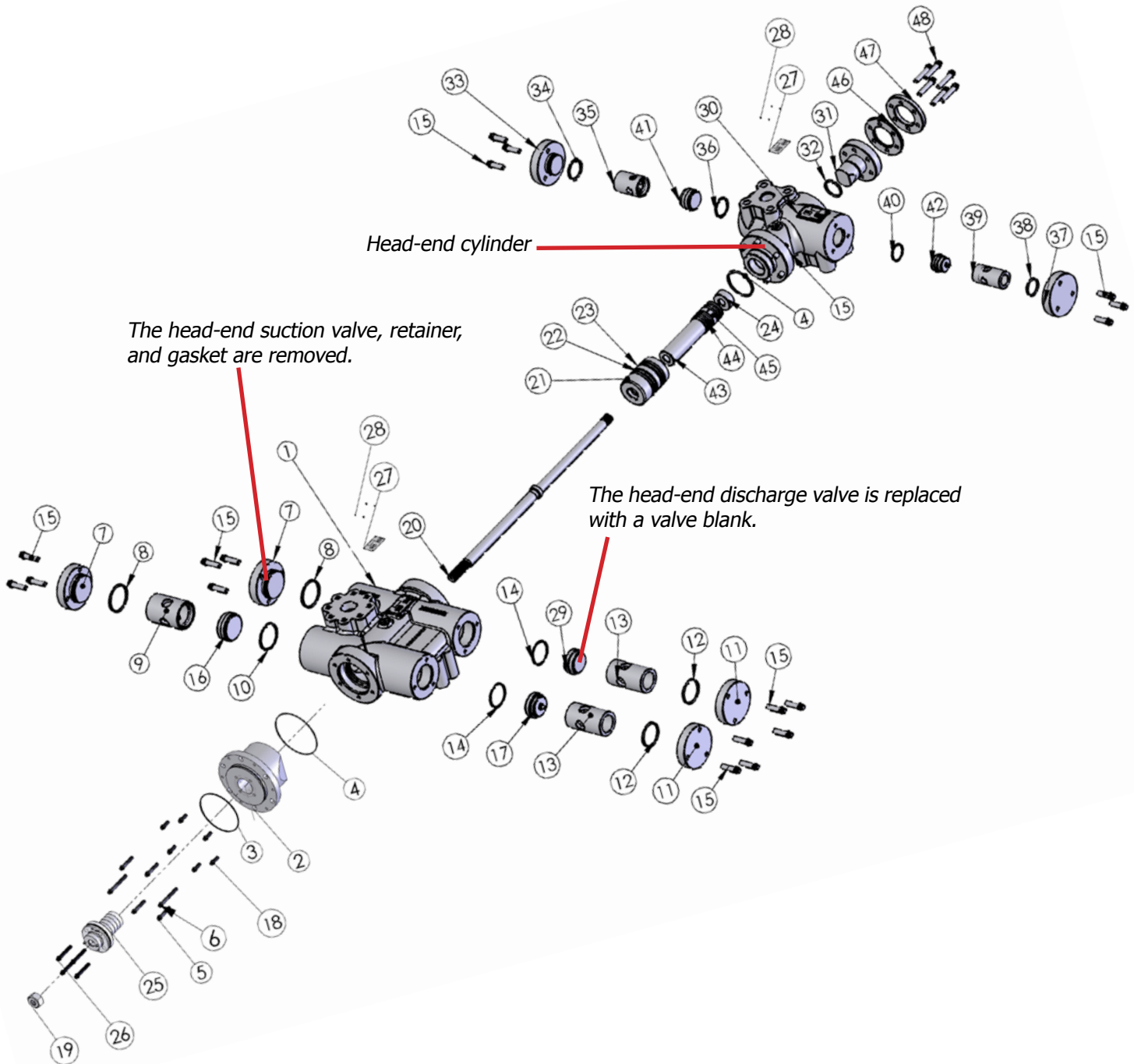
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 4.2.1.



4.1.2 4.0 x 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

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25122A	CYLINDER, STEEPLE, 2.25" SAHE × 4.0" SACE ASSEMBLY				
1	VRC25400	CYLINDER, 4.0 INCH DA	1			
2	VRC25401	HEAD, CRANK END, 4.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25402	O-RING, HEAD, CRANK & OUTER END, 4.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	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 INCH CYLINDER	2	2	2	2
9	VRC25406	RETAINER, VALVE, SUCTION, 4.0" CYLINDER	1			1
10	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER (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" CYLINDER (3.0-3.5" SAHE)	2	2	2	2
13	VRC25408	RETAINER, VALVE, DISCHARGE, 4.0" CYLINDER	2			
14	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5-4.0" CYLINDER (3.0-3.5 SAHE)	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26415A	VALVE, SUCTION, 3.5 - 4.0" CYLINDER MEDIUM *	1	1		1
17	VRC26425A	VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER MEDIUM *	1	1		1
18	VRC25047	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24112	ROD, PISTON, 2.25" SAHE × 3.5 - 4.0" SACE	1		1	1
21	VRC24409	PISTON, 4.0" SACE STEEPLE CYLINDER, CI	1		0	1
22	VRC24401	RING, 4.0 INCH PISTON	4		4	4
23	VRC24402	BAND, RIDER, 4.0 INCH 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 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26499	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, CRANK-END, 2.25" SAHE CYLINDER	1	1	1	1
33	VRC25253	COVER, VALVE, SUCTION, 2.5-3.0" 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, 2.5-3.0" CYL	1			
38	VRC25304	O-RING, COVER, DISCHARGE VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1

4.0 × 2.25 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25258	RETAINER, VALVE, DISCHARGE, 2.5" DA & 2.25 SAHE CYLINDER	1			
40	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25 - 3.0" CYL	1	1	1	1
41	VRC26015A	VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26025A	VALVE, DISCHARGE, 2.25" & 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 INCH PISTON	4		4	4
45	VRC24212	BAND, RIDER, 2.25 INCH 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/SPACERS, 12 PT	6			

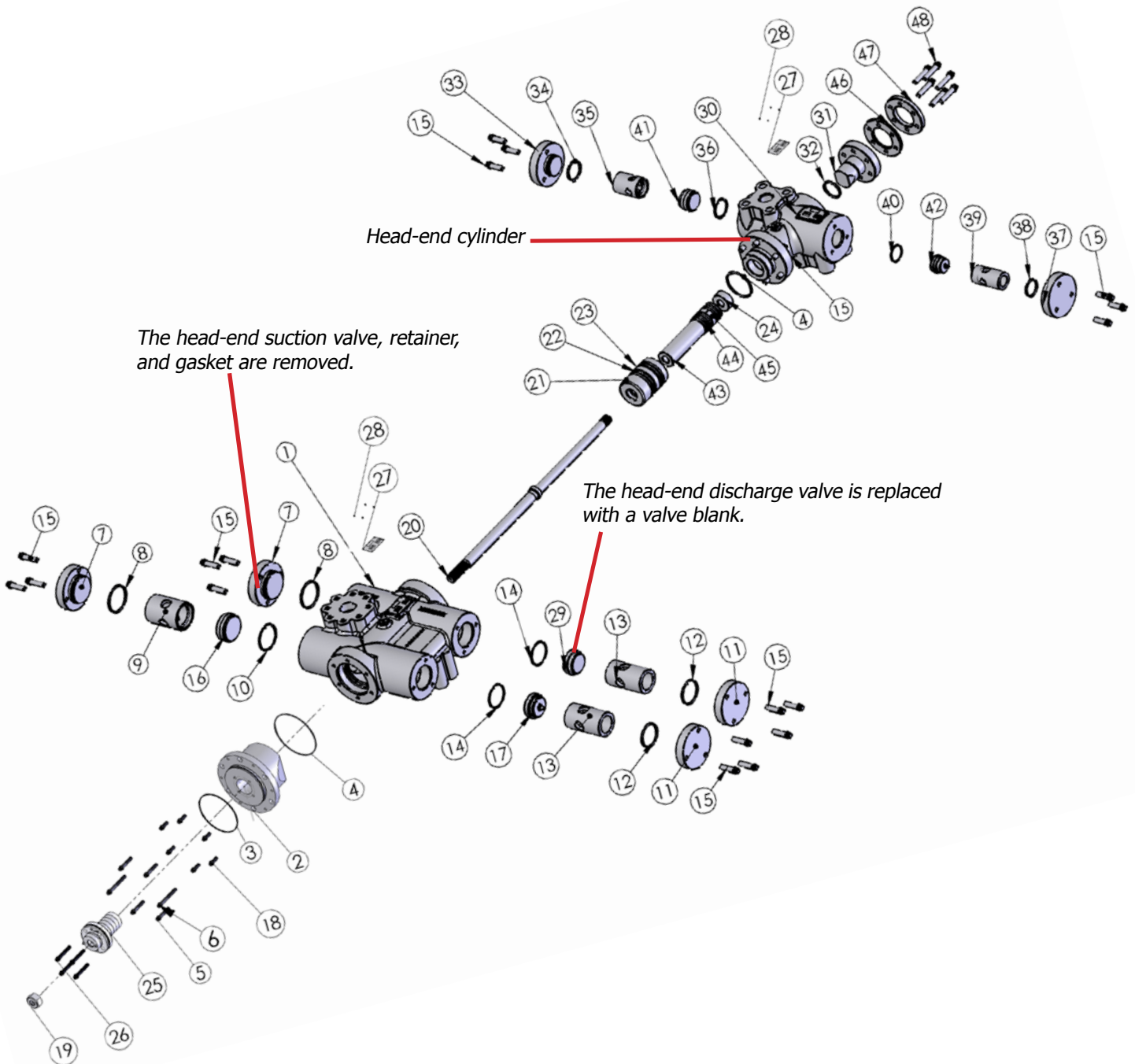
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 4.2.1.



4.1.3 4.5 x 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

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25124A	CYLINDER, STEEPLE, 2.5" SAHE × 4.5" SACE ASSEMBLY				
1	VRC25450	CYLINDER, 4.5 INCH DA	1			
2	VRC25451	HEAD, CRANK END, 4.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25452	O-RING, HEAD, CRANK & OUTER END, 4.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE, 4.5 - 5.0 INCH CYLINDER	2	2	2	2
9	VRC25456	RETAINER, VALVE, SUCTION, 4.5" CYLINDER	1			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	1	1	1	1
11	VRC25503	COVER, VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER	2			
12	VRC25504	O-RING, COVER, DISCHARGE VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25458	RETAINER, VALVE, DISCHARGE, 4.5" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26515A	VALVE, SUCTION, 4.5 - 5.0" CYLINDER MEDIUM*	1	1		1
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
18	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24111	ROD, PISTON, 2.5" SAHE × 4.5 - 5.0" SACE	1			1
21	VRC24459	PISTON, 4.5 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24451	RING, 4.5 INCH PISTON	4		4	4
23	VRC24452	BAND, RIDER, 4.5 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC21606	PIN, NAMEPLATE	8			
29	VRC26599	BLANK, VALVE, DISCHARGE 4.5 - 5.0" SACE CYLINDER	1			
30	VRC25124	CYLINDER, STEEPLE, 2.5" SAHE × 4.5" SACE	1			
31	VRC27125	HEAD, 2.5" SAHE CYLINDER	1			
32	VRC25252	O-RING, HEAD, CRANK-END, 2.5" SAHE CYLINDER	1	1	1	1
33	VRC25253	COVER, VALVE, SUCTION, 2.5-3.0" CYL.	1			
34	VRC25254	O-RING, COVER, SUCTION VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1
35	VRC25161	RETAINER, VALVE, SUCTION, 2.25" SAHE CYLINDER	1			
36	VRC25255	GASKET, SUCTION VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE, 2.5-3.0" CYL	1			
38	VRC25404	O-RING, COVER, DISCHARGE VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1

4.5 × 2.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25181	RETAINER, VALVE, DISCHARGE, 2.5" SAHE CYLINDER	1			
40	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25 - 3.0" CYL	1	1	1	1
41	VRC26015A	VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26025A	VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER MEDIUM *	1	1		1
43	VRC24215	PISTON, 2.5" SAHE × 4.5-5.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24251	RING, 2.5 INCH PISTON	4		4	4
45	VRC24252	BAND, RIDER, 2.5 INCH 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/SPACERS, 12 PT	6			

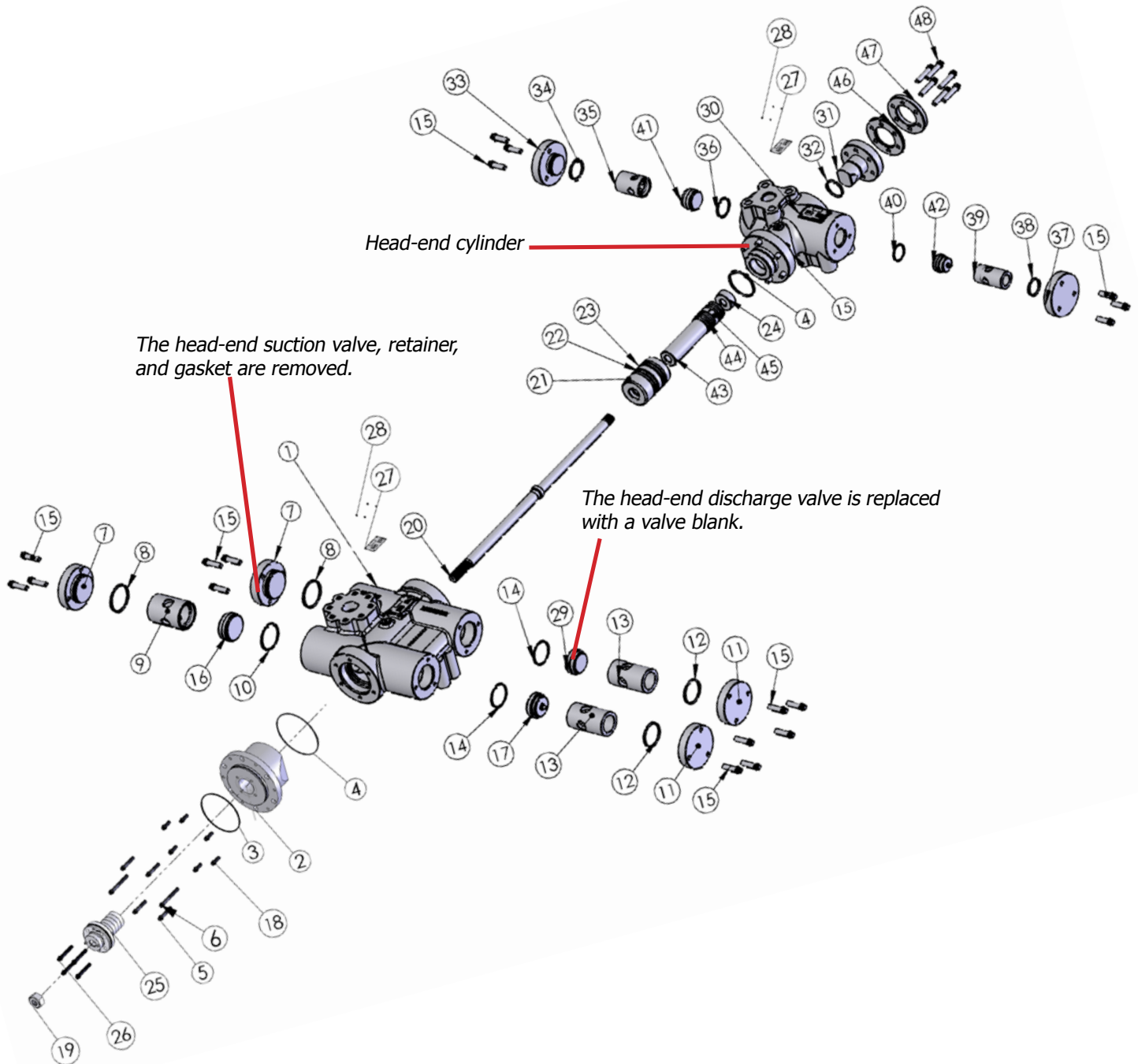
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 4.2.1.



4.1.4 4.5 x 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

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25131A	CYLINDER, STEEPLE, 3.0" SAHE × 4.5" SACE ASSEMBLY				
1	VRC25450	CYLINDER, 4.5 INCH DA	1			
2	VRC25451	HEAD, CRANK END, 4.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25452	O-RING, HEAD, CRANK & OUTER END, 4.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER	2	2	2	2
9	VRC25456	RETAINER, VALVE, SUCTION 4.5" CYLINDER	1			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	1	1	1	1
11	VRC25503	COVER, VALVE, DISCHARGE 4.5 - 5.0" CYL	2			
12	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25458	RETAINER, VALVE, DISCHARGE, 4.5" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26515A	VALVE, SUCTION, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
18	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24113	ROD, PISTON, 3.0"- 3.5" SAHE × 4.5 - 5.0" SACE	1			1
21	VRC24459	PISTON, 4.5 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24451	RING, 4.5 INCH PISTON	4		4	4
23	VRC24452	BAND, RIDER, 4.5 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1			
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26599	BLANK, VALVE, DISCHARGE, 4.5 - 5.0" SACE CYLINDER	1			
30	VRC25131	CYLINDER, STEEPLE, 3.0" SAHE × 4.5" SACE	1			
31	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
32	VRC25302	O-RING, HEAD, CRANK OUTER END & 3.0" SAHE CYLINDER	1	1	1	1
33	VRC25353	COVER, VALVE, SUCTION, 3.5-4.0" CYL.	1			
34	VRC25254	O-RING, COVER, SUCTION VALVE 2.25 - 3.0" CYLINDER	1	1	1	1
35	VRC25160	RETAINER, VALVE, SUCTION, 3.0" SAHE CYLINDER	1			
36	VRC25255	GASKET, SUCT, VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE 3.5-4.0" CYL.	1			
38	VRC25404	O-RING, COVER, DISCHARGE VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1

4.5 × 3.0 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25180	RETAINER, VALVE, DISCHARGE, 3.0" SAHE CYLINDER	1			
40	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0 - 3.5" SAHE CYLINDER, MEDIUM *	1	1		1
42	VRC26123A	VALVE, DISCHARGE, 3.0" MEDIUM & 3.5" LIGHT SAHE CYLINDER*	1	1		1
43	VRC24310	PISTON, 3.0" SAHE × 4.5-5.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24301	RING, 3.0 INCH PISTON	4		4	1
45	VRC24302	BAND, RIDER, 3.0" PISTON	1		1	1
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD / SPACERS, 12 PT	6			

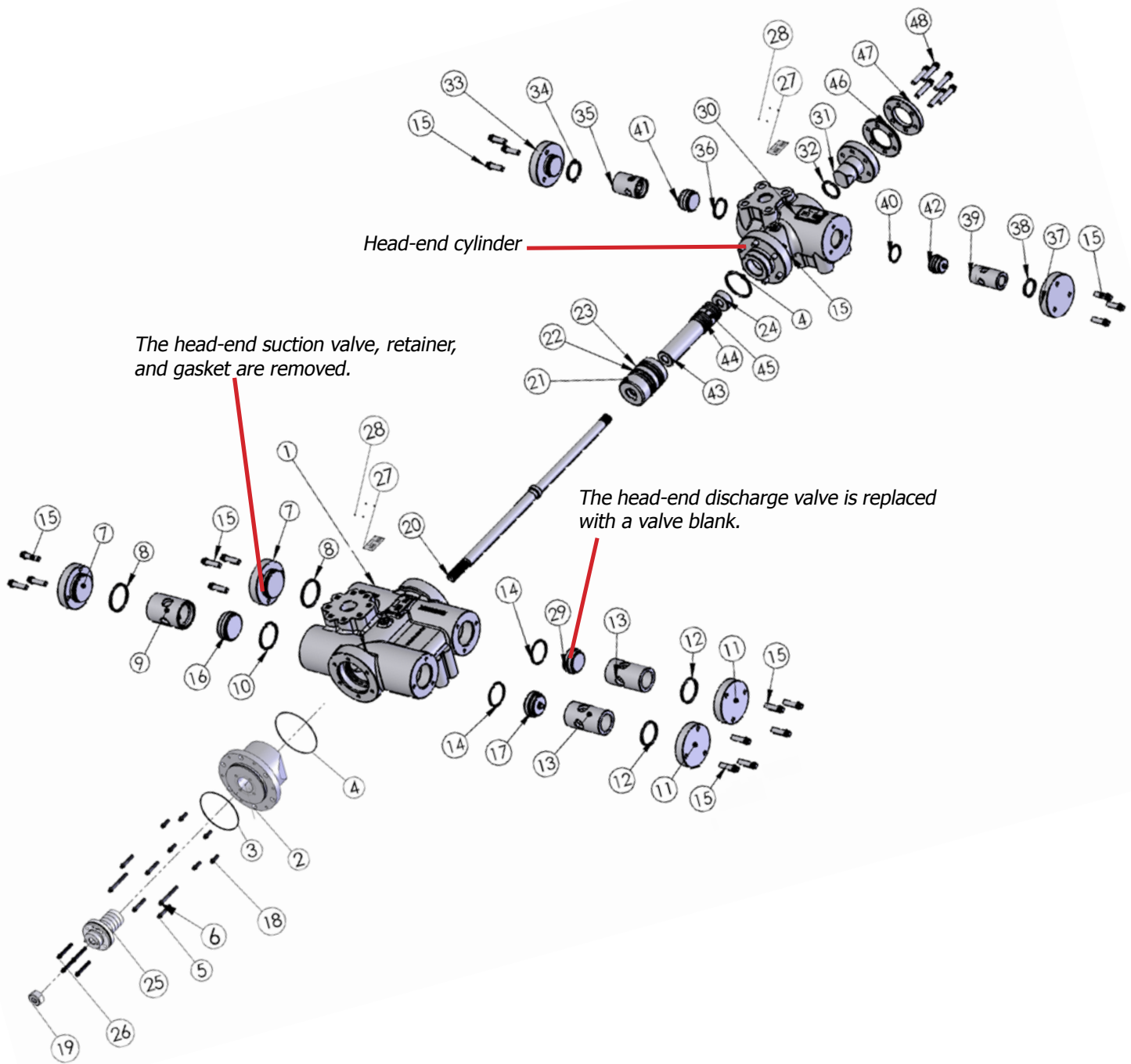
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 4.2.1.



4.1.5 4.5 x 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

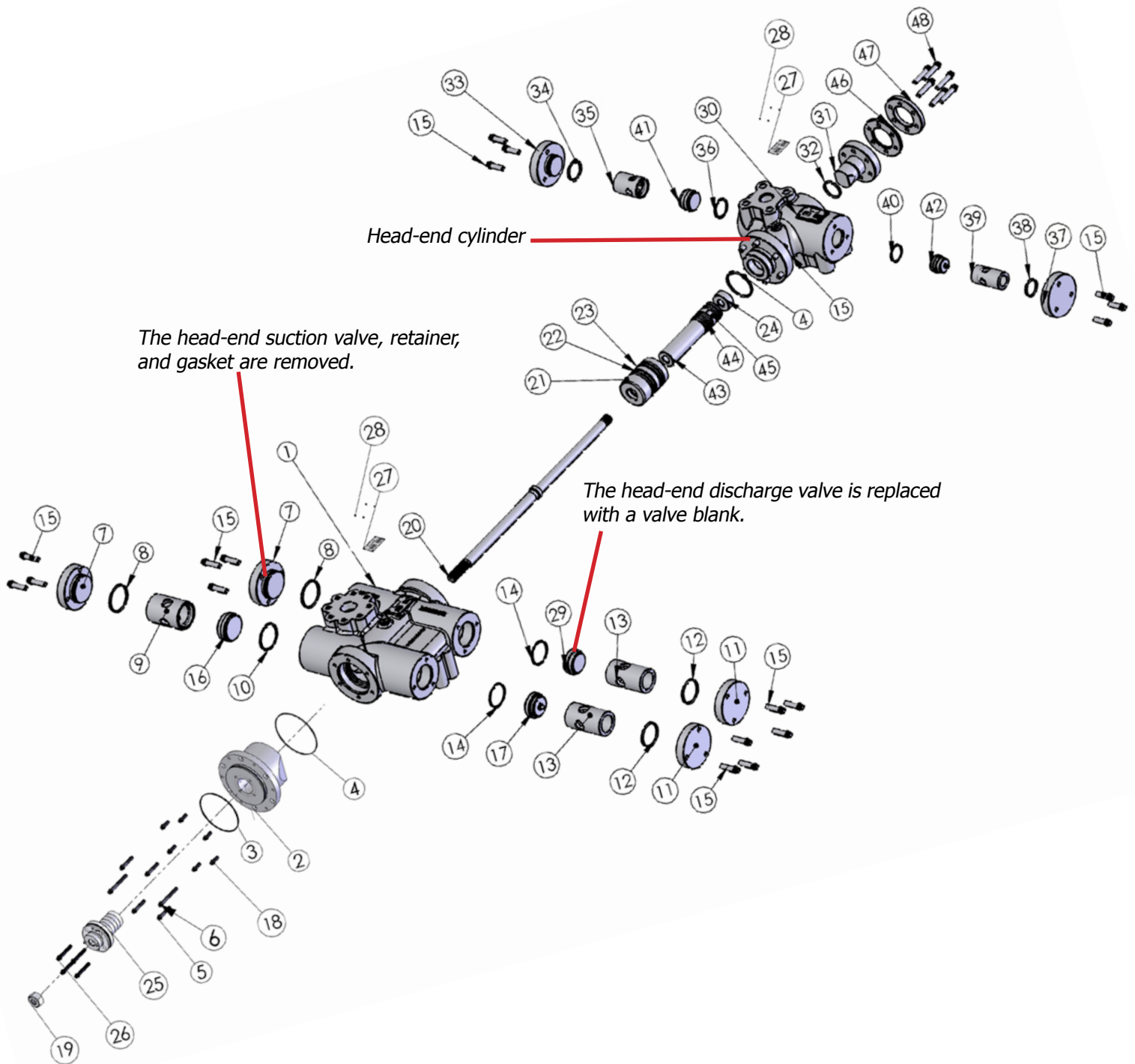
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25135A	CYLINDER, STEEPLE, 3.5" SAHE × 4.5" SACE ASSEMBLY				
1	VRC25450	CYLINDER, 4.5 INCH DA	1			
2	VRC25451	HEAD, CRANK END, 4.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1	1	1
4	VRC25452	O-RING, HEAD, CRANK & OUTER END, 4.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER	2	2	2	2
9	VRC25456	RETAINER, VALVE, SUCTION 4.5" CYLINDER	1			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	1	1	1	1
11	VRC25503	COVER, VALVE, DISCHARGE 4.5 - 5.0" CYL	2			
12	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25458	RETAINER, VALVE, DISCHARGE, 4.5" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	1	1	1
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26515A	VALVE, SUCTION, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
18	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24113	ROD, PISTON, 3.0"-3.5" SAHE × 4.5 - 5.0" SACE	1			1
21	VRC24459	PISTON, 4.5 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24451	RING, 4.5 INCH PISTON	4		4	4
23	VRC24452	BAND, RIDER, 4.5 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26599	BLANK, VALVE, DISCHARGE, 4.5 - 5.0" SACE CYLINDER	1			
30	VRC25135	CYLINDER, STEEPLE, 3.5" SAHE × 4.5" SACE	1			
31	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
32	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1	1	1	1
33	VRC25353	COVER, VALVE, SUCTION, 3.5 - 4.0" CYLINDER (3.0-3.5" SAHE)	2			
34	VRC25354	O-RING, COVER, SUCTION VALVE 3.5 - 4.0" CYL	1	1	1	1
35	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA & 3.5" SAHE CYLINDER	1			
36	VRC25355	GASKET, SUCT, VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5" SAHE)	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER (3.0-3.5" SAHE)	1			
38	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5-4.0" CYLINDER (3.0-3.5" SAHE)	1	1	1	1

4.5 × 3.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25183	RETAINER, VALVE, DISCHARGE, 3.5" SAHE CYLINDER	1			
40	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0-3.5" SAHE CYLINDER, MEDIUM *	1	1		1
42	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY. & 3.5" MEDIUM SAHE CYLINDER*	1	1		1
43	VRC24315	PISTON, 3.5" SAHE × 4.5-5.0" SACE STEEPLE CYLINDER, AL	1	1		1
44	VRC24351	RING, 3.5 INCH PISTON	4		4	4
45	VRC24352	BAND, RIDER, 3.5 INCH PISTON	1		1	1
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".						
** A heavier jam nut may be used if required for balancing. See Section 3.4.3.						
*** Packing Case Ring Kits are available. See Section 4.2.1.						



4.1.6 5.0 x 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

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25125A	CYLINDER, STEEPLE, 2.5" SAHE × 5.0" SACE ASSEMBLY				
1	VRC25500	CYLINDER, 5.0 INCH DA	1			
2	VRC25501	HEAD, CRANK END, 5.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25502	O-RING, HEAD, CRANK & OUTER END, 5.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER	2	2	2	2
9	VRC25506	RETAINER, VALVE, SUCTION 5.0" CYLINDER	1			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	1	1	1	1
11	VRC25503	COVER, VALVE, DISCHARGE 4.5 - 5.0" CYL	2			
12	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25508	RETAINER, VALVE, DISCHARGE, 5.0" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26515A	VALVE, SUCTION, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
18	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24111	ROD, PISTON, 2.5" SAHE × 4.5 - 5.0" SACE	1			1
21	VRC24509	PISTON, 5.0" SACE STEEPLE CYLINDER, AL	1			1
22	VRC24501	RING, 5.0 INCH PISTON	4		4	4
23	VRC24502	BAND, RIDER, 5.0 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26599	BLANK, VALVE, DISCHARGE, 4.5 - 5.0" SACE CYLINDER	1			
30	VRC25125	CYLINDER, STEEPLE, 2.5" SAHE × 5.0" SACE	1			
31	VRC27125	HEAD, 2.5" SAHE CYLINDER	1			
32	VRC25252	O-RING, HEAD, CRANK OUTER-END, 2.5" SAHE CYLINDER	1	1	1	1
33	VRC25253	COVER, VALVE, SUCTION, 2.5-3.0" CYL.	1			
34	VRC25254	O-RING, COVER, SUCTION VALVE 2.25 - 3.0" CYL	1	1	1	1
35	VRC25161	RETAINER, VALVE, SUCTION, 2.5" SAHE CYLINDER	1			
36	VRC25255	GASKET, SUCT, VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE, 2.5-3.0" CYL	1			
38	VRC254 04	O-RING, COVER, DISCHARGE VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1

5.0 × 2.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25181	RETAINER, VALVE, DISCHARGE, 2.5" SAHE CYLINDER	1			
40	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
41	VRC26015A	VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER, MEDIUM *	1	1		1
42	VRC26025A	VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER MEDIUM *	1	1		1
43	VRC24215	PISTON, 2.5" SAHE × 4.5 - 5.0" SACE STEEPLE CYLINDER AL	1			1
44	VRC24251	RING, 2.5 INCH PISTON	4		4	4
45	VRC24252	BAND, RIDER, 2.5 INCH 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/SPACERS, 12 PT	6			

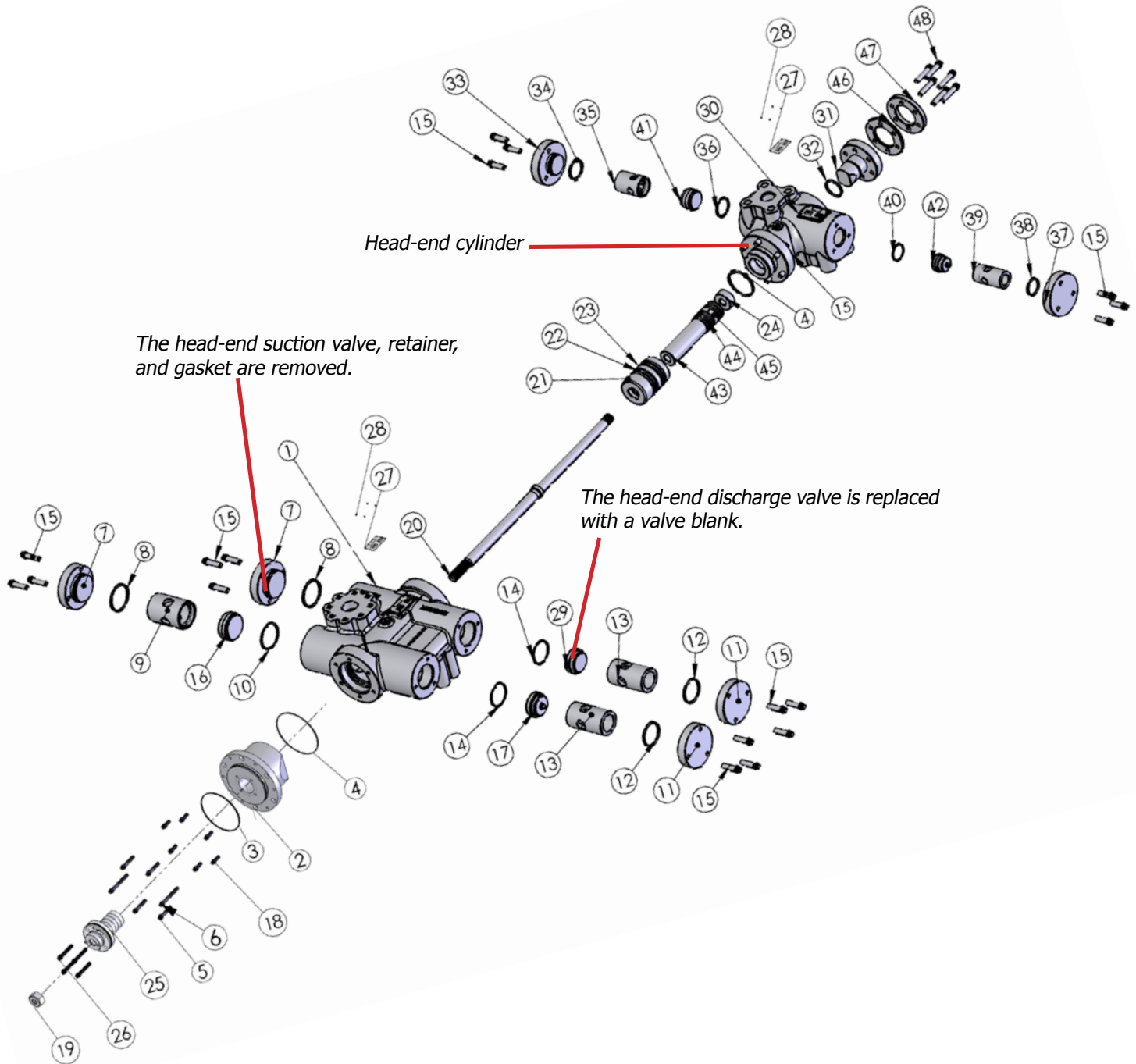
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 4.2.1.



4.1.7 5.0 x 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

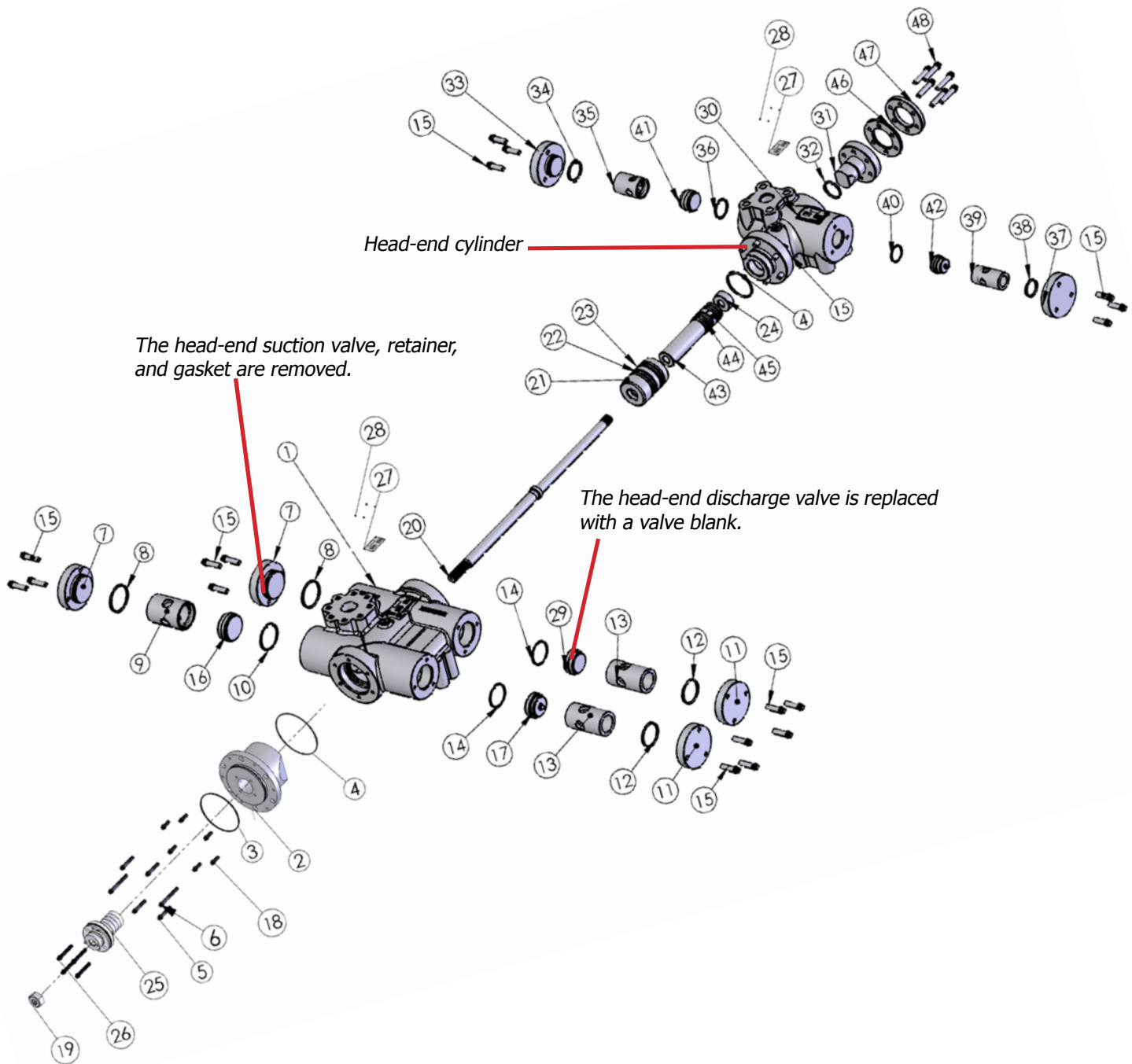
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25132A	CYLINDER, STEEPLE, 3.0" SAHE × 5.0" SACE ASSEMBLY				
1	VRC25500	CYLINDER, 5.0 INCH DA	1			
2	VRC25501	HEAD, CRANK END, 5.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25502	O-RING, HEAD, CRANK & OUTER END, 5.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER	2	2	2	2
9	VRC25506	RETAINER, VALVE, SUCTION 5.0" CYLINDER	1			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	1	1	1	1
11	VRC25503	COVER, VALVE, DISCHARGE 4.5 - 5.0" CYL	2			
12	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25508	RETAINER, VALVE, DISCHARGE, 5.0" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26515A	VALVE, SUCTION, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
18	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24113	ROD, PISTON, 3.0" - 3.5" SAHE × 4.5-5.0" SACE	1			1
21	VRC24509	PISTON, 5.0" SACE STEEPLE CYLINDER, AL	1			1
22	VRC24501	RING, 5.0 INCH PISTON	4		4	4
23	VRC24502	BAND, RIDER, 5.0 INCH PISTON	1			1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26599	BLANK, VALVE, DISCHARGE, 4.5 - 5.0" SACE CYLINDER	1			
30	VRC25132	CYLINDER, STEEPLE, 3.0" SACE × 5.0" SACE	1			
31	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
32	VRC25302	O-RING, HEAD, CRANK OUTER-END, 3.0" SAHE CYLINDER	1			1
33	VRC25353	COVER, VALVE, SUCTION, 3.5-4.0" CYL.	1			
34	VRC25254	O-RING, COVER, SUCTION VALVE 2.25 - 3.0" CYL	1	1	1	1
35	VRC25160	RETAINER, VALVE, SUCTION, 3.0" SAHE CYLINDER	1			
36	VRC25255	GASKET, SUCT, VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE 3.5-4.0" CYL.	1			
38	VRC25404	O-RING, COVER, DISCHARGE VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1

5.0 × 3.0 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25180	RETAINER, VALVE, DISCHARGE, 3.0" SAHE CYLINDER	1			
40	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0 - 3.5" SAHE CYLINDER, MEDIUM *	1	1		1
42	VRC26123A	VALVE, DISCHARGE, 3.0" MED. & 3.5" LIGHT SAHE CYLINDER *	1	1		1
43	VRC24310	PISTON, 3.0" SAHE × 4.5 - 5.0" SACE STEEPLE CYLINDER, AL	1	2	2	2
44	VRC24301	RING, 3.0 INCH PISTON	4	2		2
45	VRC24302	BAND, RIDER, 3.0 INCH PISTON	1	2		2
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p>						
<p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p>						
<p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						



4.1.8 5.0 x 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.

5.0 × 3.5 STEEPLE CYLINDER

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25136A	CYLINDER, STEEPLE, 3.5" SAHE × 5.0" SACE ASSEMBLY				
1	VRC25500	CYLINDER, 5.0 INCH DA	1			
2	VRC25501	HEAD, CRANK END, 5.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25502	O-RING, HEAD, CRANK & OUTER END, 5.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER	2			
8	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER	2	2	2	2
9	VRC25506	RETAINER, VALVE, SUCTION 5.0" CYLINDER	1			
10	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER	1	1	1	1
11	VRC25503	COVER, VALVE, DISCHARGE 4.5 - 5.0" CYL	2			
12	VRC25504	O-RING, COVER, DISCHARGE, VALVE, 4.5 - 5.0" CYLINDER	2	2	2	2
13	VRC25508	RETAINER, VALVE, DISCHARGE, 5.0" CYLINDER	2			
14	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26515A	VALVE, SUCTION, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
17	VRC26525A	VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER MEDIUM *	1	1		1
18	VRC23107	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24113	ROD, PISTON, 3.0" - 3.5" SAHE × 4.5 - 5.0" SACE	1			1
21	VRC24509	PISTON, 5.0 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24501	RING, 5.0 INCH PISTON	4		4	4
23	VRC24502	BAND, RIDER, 5.0 INCH PISTON	1			1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC21606	PIN, NAMEPLATE	8			
29	VRC26599	BLANK, VALVE, DISCHARGE, 4.5 - 5.0" SACE CYLINDER	1			
30	VRC25136	CYLINDER, STEEPLE, 3.5" SAHE × 5.0" SACE	1			
31	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
32	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1	1	1	1
33	VRC25353	COVER, VALVE, SUCTION, 3.5 - 4.0" CYLINDER	1			
34	VRC25354	O-RING, COVER, SUCTION VALVE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
35	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA & 3.5" SAHE CYLINDER	1			
36	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1			
38	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1

5.0 × 3.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25183	RETAINER, VALVE, DISCHARGE, 3.5" SAHE CYLINDER	1			
40	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0 - 3.5" SAHE CYLINDER, MEDIUM *	1	1		1
42	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY & 3.5" MEDIUM SAHE CYLINDER*	1	1		1
43	VRC24315	PISTON, 3.5" SAHE × 4.5 - 5.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24351	RING, 3.5 INCH PISTON	4		4	4
45	VRC24352	BAND, RIDER, 3.5 INCH PISTON	1		1	1
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			

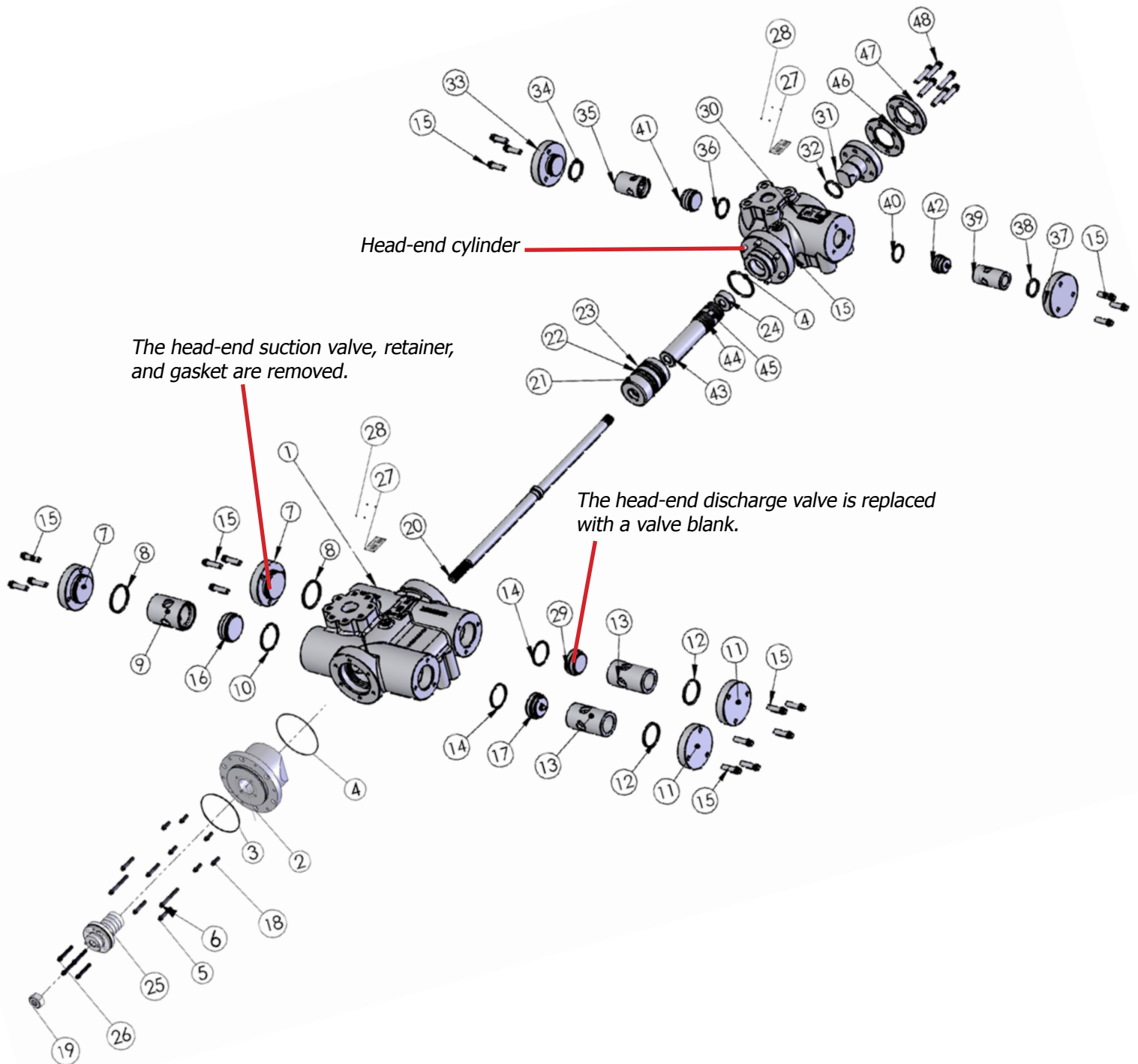
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 4.2.1.



4.1.9 5.5 x 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

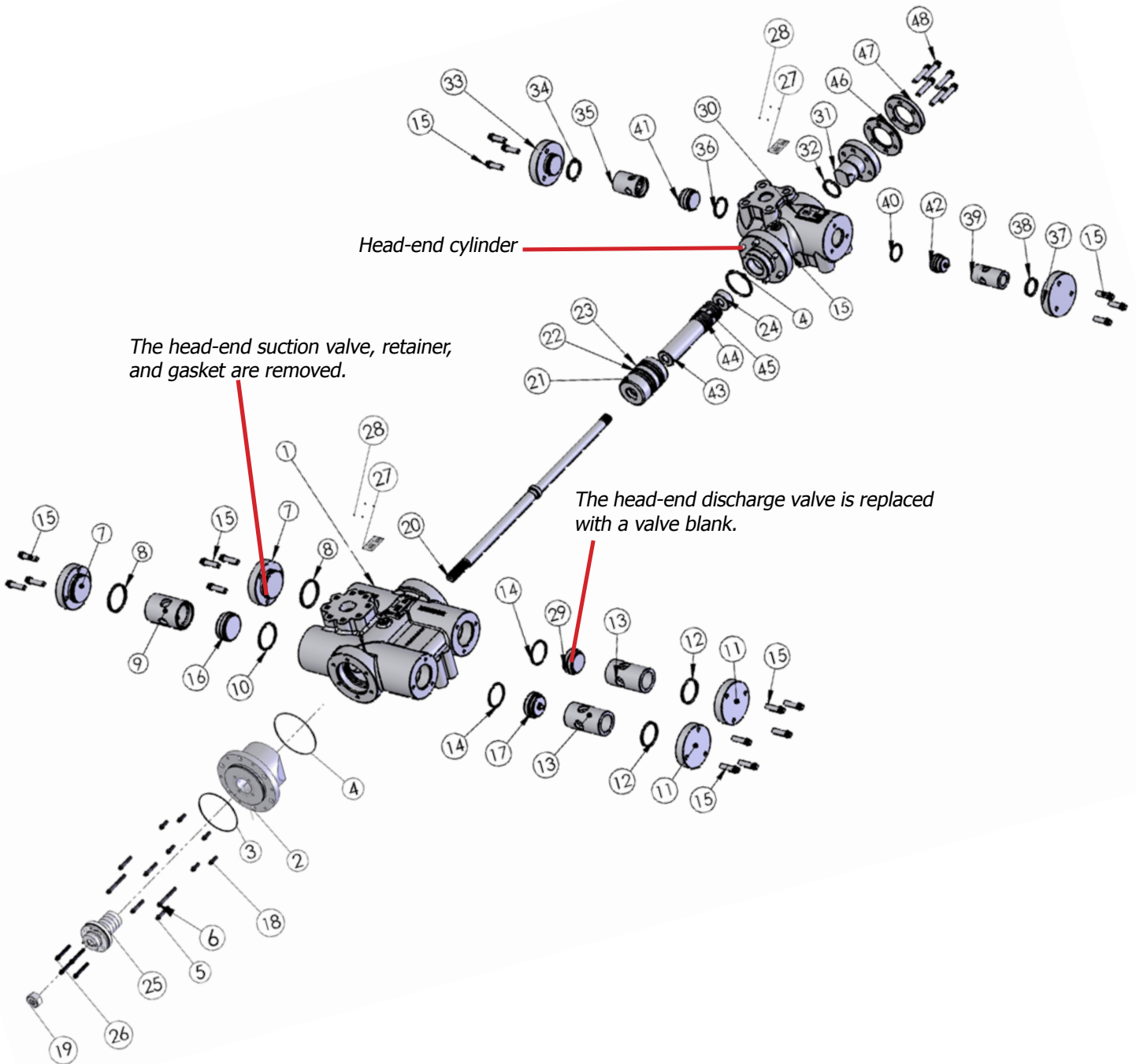
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25133A	CYLINDER, STEEPLE, 3.0" SAHE × 5.5" SACE ASSEMBLY				
1	VRC25550	CYLINDER, 5.5 INCH DA	1			
2	VRC25551	HEAD, CRANK END, 5.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25552	O-RING, HEAD, CRANK & OUTER END, 5.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25553	COVER, VALVE, SUCTION , 5.5 - 6.0" CYLINDER	2			
8	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
9	VRC25556	RETAINER, VALVE, SUCTION, 5.5" CYLINDER	1			
10	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5 - 6.0" CYLINDER	1	1	1	1
11	VRC25603	COVER, VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER	2			
12	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
13	VRC25558	RETAINER, VALVE, DISCHARGE, 5.5" CYLINDER	2			
14	VRC25605	GASKET, DISCHARGE, VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26615A	VALVE, SUCTION, 5.5" - 6.0" CYLINDER MEDIUM *	1	1		1
17	VRC26625A	VALVE, DISCHARGE, 5.5" - 6.0" CYLINDER MEDIUM *	1	1		1
18	VRC25077	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24114	ROD, PISTON, 3.0" - 3.5" SAHE × 5.5 - 6.0" SACE	1			1
21	VRC24559	PISTON, 5.5 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24551	RING, 5.5 INCH PISTON	4		4	4
23	VRC24552	BAND, RIDER, 5.5 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26699	BLANK, VALVE, DISCHARGE, 5.5 - 6.0" SACE CYLINDER	1			
30	VRC25133	CYLINDER, STEEPLE, 3.0" SAHE × 5.5" SACE	1			
31	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
32	VRC25302	O-RING, HEAD, CRANK OUTER-END & SAHE 3.0" CYLS.	1	1	1	1
33	VRC25353	COVER, VALVE, SUCTION, 3.5-4.0" CYL.	1			
34	VRC25254	O-RING, COVER, SUCTION VALVE 2.25 - 3.0" CYLINDER	1	1	1	1
35	VRC25160	RETAINER, VALVE, SUCTION 3.0" SAHE CYLINDER	1			
36	VRC25255	GASKET, SUCTION VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE 3.5-4.0" CYL.	1			
38	VRC25404	O-RING, COVER, DISCHARGE VALVE, 2.25 - 3.0" CYLINDER	1	1	1	1

5.5 × 3.0 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25180	RETAINER, VALVE, DISCHARGE, 3.0" SAHE CYLINDER	1			
40	VRC25305	GASKET, DISCHARGE VALVE SEAT, 2.25 - 3.0" CYLINDER	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER MEDIUM*	1	1		1
42	VRC26123A	VALVE, DISCHARGE, 3.0" MEDIUM & 3.5" LIGHT SAHE CYLINDER*	1	1		1
43	VRC24311	PISTON, 3.0" SAHE × 5.5 - 6.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24301	RING, 3.0 INCH PISTON	4		4	4
45	VRC24302	BAND, RIDER, 3.0 INCH PISTON	1		1	1
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p>						
<p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p>						
<p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						



4.1.10 5.5 x 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.

5.5 × 3.5 STEEPLE CYLINDER

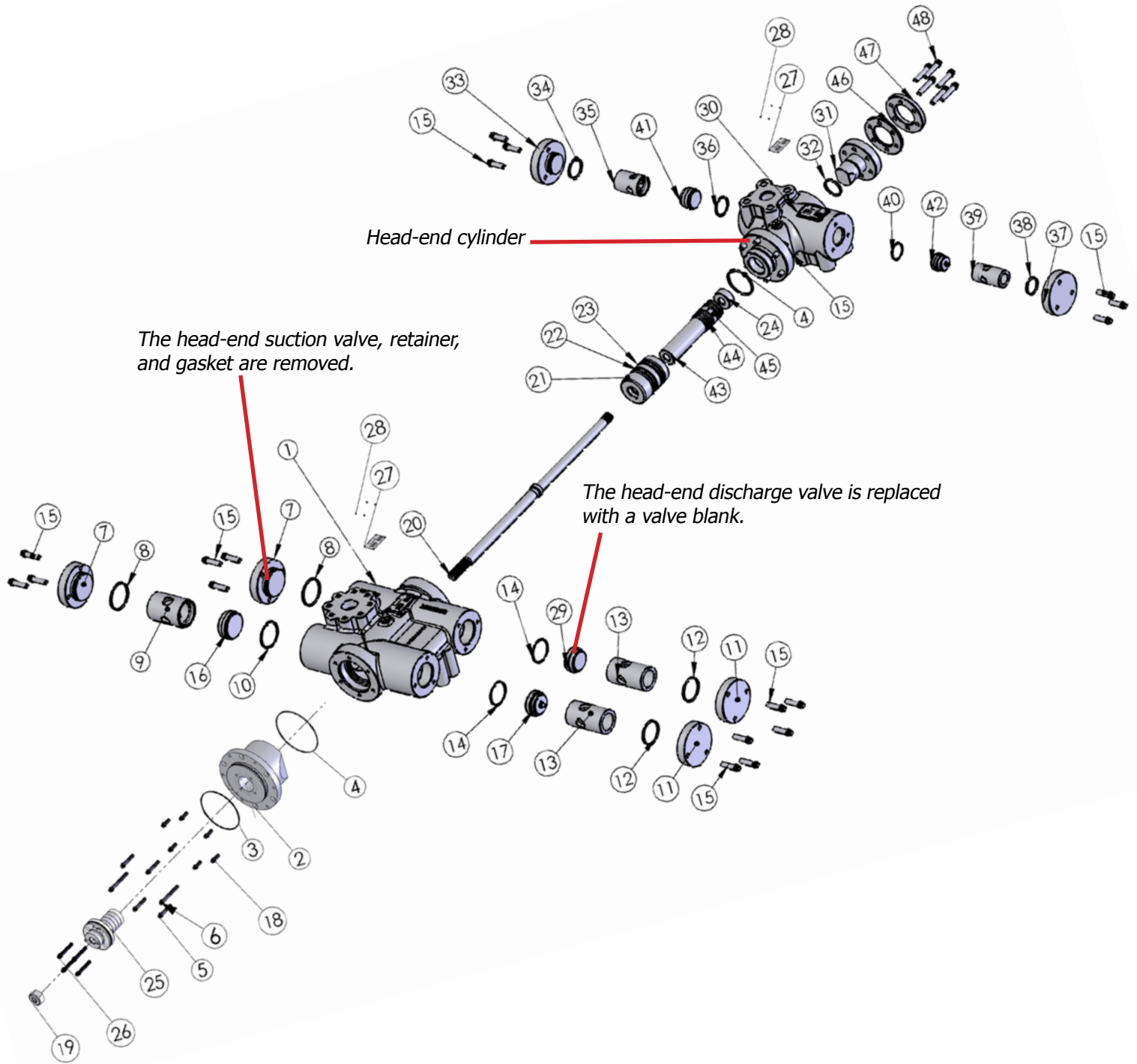
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25137A	CYLINDER, STEEPLE, 3.5" SAHE × 5.5" SACE ASSEMBLY				
1	VRC25550	CYLINDER, 5.5 INCH DA	1			
2	VRC25551	HEAD, CRANK END, 5.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25552	O-RING, HEAD, CRANK & OUTER END, 5.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25553	COVER, VALVE, SUCTION , 5.5 - 6.0" CYLINDER	2			
8	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
9	VRC25556	RETAINER, VALVE, SUCTION, 5.5" CYLINDER	1			
10	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5 - 6.0" CYL	1	1	1	1
11	VRC25603	COVER, VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER	2			
12	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
13	VRC2558	RETAINER, VALVE, DISCHARGE, 5.5" CYLINDER	2			
14	VRC25605	GASKET, DISCHARGE, VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26615A	VALVE, SUCTION, 5.5" - 6.0" CYLINDER MEDIUM *	1	1		1
17	VRC26625A	VALVE, DISCHARGE, 5.5" - 6.0" CYLINDER MEDIUM *	1	1		1
18	VRC25077	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24114	ROD, PISTON, 3.0 - 3.5" SAHE × 5.5 - 6.0" SACE	1			1
21	VRC24559	PISTON, 5.5 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24551	RING, 5.5 INCH PISTON	2		2	2
23	VRC24552	BAND, RIDER, 5.5 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC21606	PIN, NAMEPLATE	8			
29	VRC26699	BLANK, VALVE, DISCHARGE, 5.5 - 6.0" SACE CYLINDER	1			
30	VRC25137	CYLINDER, STEEPLE, 3.5" SAHE × 5.5" SACE	1			
31	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
32	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1			1
33	VRC25353	COVER, VALVE, SUCTION, 3.5 - 4.0" CYLINDER	1			
34	VRC25354	O-RING, COVER, SUCTION VALVE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
35	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA & 3.5" SAHE CYLINDER	1			
36	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1			
38	VRC25404	O-RING, COVER, DISCHARGE VALVE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1

5.5 × 3.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25183	RETAINER, VALVE, DISCHARGE, 3.5" SAHE CYLINDER	1			
40	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0 - 3.5" SAHE CYLINDER, MEDIUM *	1	1		1
42	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY. & 3.5" MEDIUM SAHE CYLINDER	1	1	1	1
43	VRC24316	PISTON, 3.5" SAHE × 5.5 - 6.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24351	RING, 3.5 INCH PISTON	4		4	4
45	VRC24352	BAND, RIDER, 3.5 INCH PISTON	1		1	1
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD / SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p>						
<p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p>						
<p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						



4.1.11 6.0 x 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

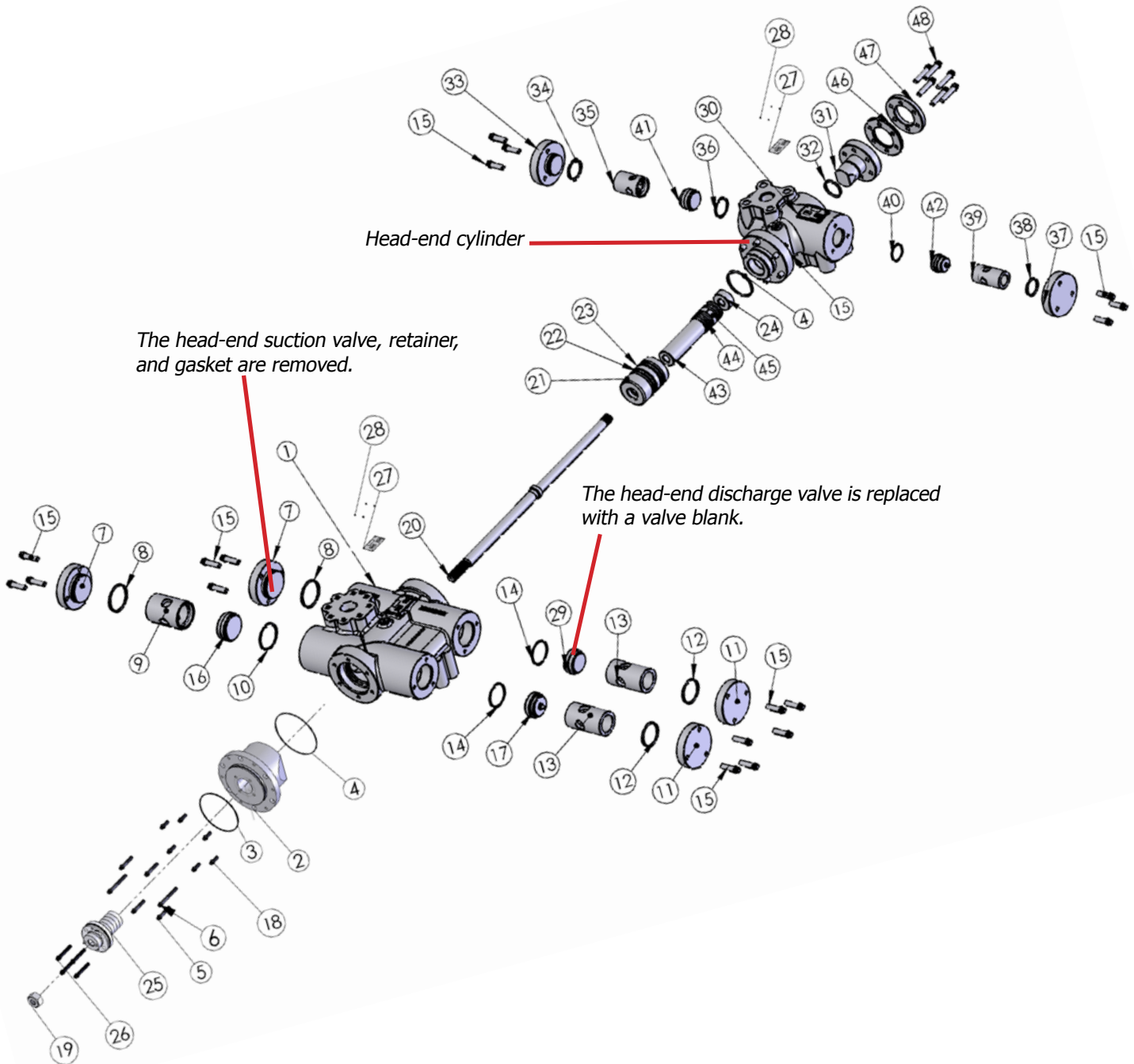
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25134A	CYLINDER, STEEPLE, 3.0" SAHE × 6.0" SACE ASSEMBLY				
1	VRC25600	CYLINDER, 6.0 INCH DA	1			
2	VRC25601	HEAD, CRANK END, 6.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25602	O-RING, HEAD, CRANK & OUTER END, 6.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25553	COVER, VALVE, SUCTION, 5.5 - 6.0" CYLINDER	2			
8	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
9	VRC25606	RETAINER, VALVE, SUCTION, 6.0" CYLINDER	1			
10	VRC25555	GASKET, SUCTION VALVE SEAT, 5.5 - 6.0" CYLINDER	1	1	1	1
11	VRC25603	COVER, VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER	2			
12	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
13	VRC25608	RETAINER, VALVE, DISCHARGE, 6.0" CYLINDER	2			
14	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5 - 6.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26615A	VALVE, SUCTION, 5.5 - 6.0" CYLINDER MEDIUM *	1	1		1
17	VRC26625A	VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER MEDIUM *	1	1		1
18	VRC25077	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24114	ROD, PISTON, 3.0 - 3.5" SAHE × 5.5 - 6.0" SACE	1		1	1
21	VRC24609	PISTON, 6.0 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24601	RING, 6.0 INCH PISTON	4		4	4
23	VRC24602	BAND, RIDER, 6.0 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1		1	
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1			
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC21606	PIN, NAMEPLATE	8			
29	VRC26699	BLANK, VALVE, DISCHARGE 5.5 - 6.0" SACE CYLINDER	1			
30	VRC25134	CYLINDER, STEEPLE, 3.0" SAHE × 6.0" SACE	1			
31	VRC27131	HEAD, 3.0" SAHE CYLINDER	1			
32	VRC25302	O-RING, HEAD, CRANK OUTER-END, 3.0" SAHE CYLS.	1	1	1	1
33	VRC25353	COVER, VALVE, SUCTION, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1			
34	VRC25354	O-RING, COVER, SUCTION VALVE 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
35	VRC25160	RETAINER, VALVE, SUCTION, 3.0" SAHE CYLINDER	1			
36	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1			
38	VRC25404	O-RING, COVER, DISCHARGE, VALVE, 3.5-4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1

6.0 × 3.0 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25180	RETAINER, VALVE DISCHARGE, 3.0" SAHE CYLINDER	1			
40	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER MEDIUM	1	1		1
42	VRC26123A	VALVE, DISCHARGE, 3.0" MEDIUM & 3.5" LIGHT SAHE CYLINDER	1	1		1
43	VRC24311	PISTON, 3.0" SAHE × 5.5 - 6.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24301	RING, 3.0 INCH PISTON	4		4	4
45	VRC24302	BAND, RIDER, 3.0 INCH PISTON	1		1	1
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p>						
<p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p>						
<p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						



4.1.12 6.0 x 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.

6.0 × 3.5 STEEPLE CYLINDER

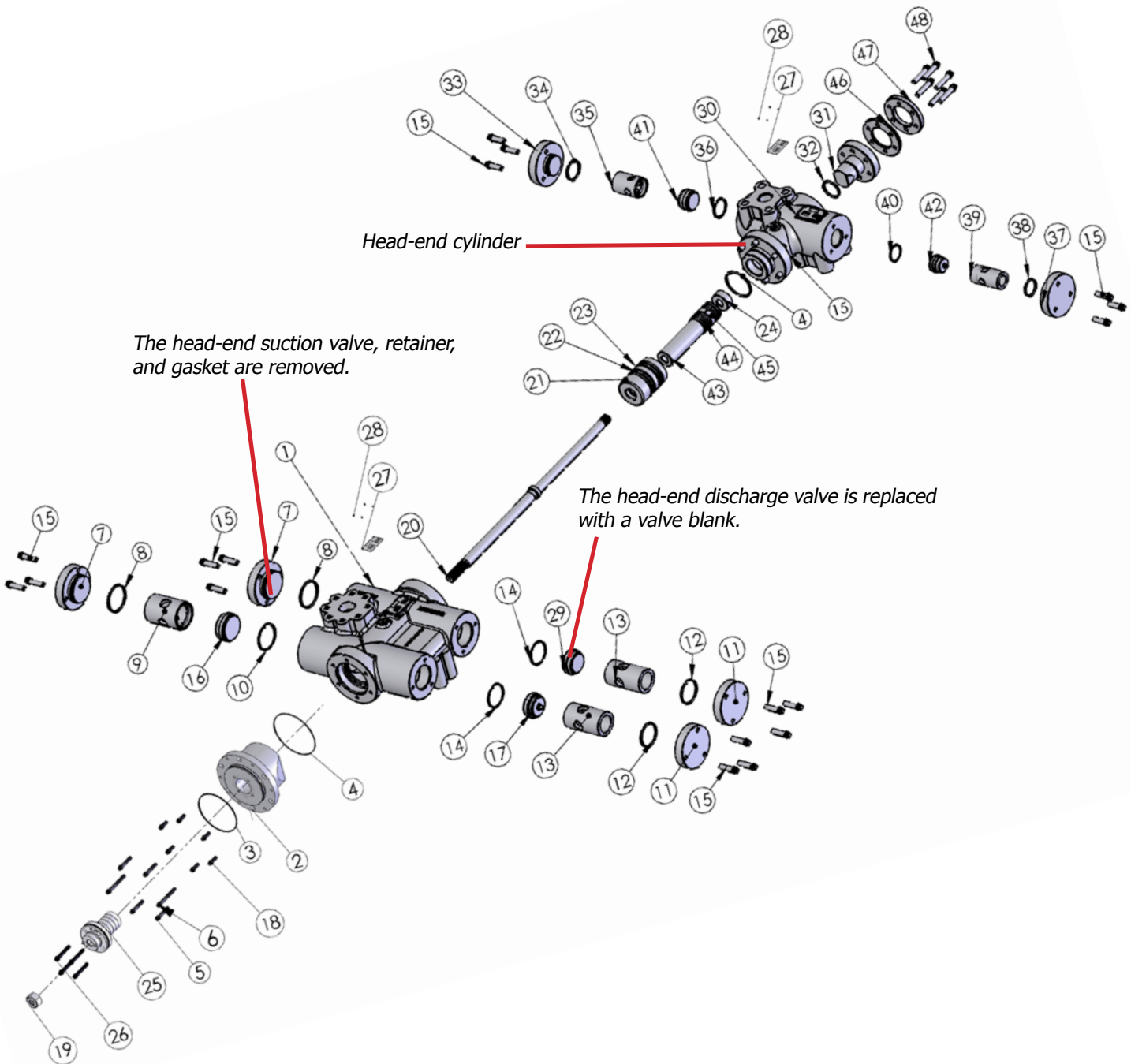
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25138A	CYLINDER, STEEPLE, 3.5" SAHE × 6.0" SACE ASSEMBLY				
1	VRC25600	CYLINDER, 6.0 INCH DA	1			
2	VRC25601	HEAD, CRANK END, 6.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25602	O-RING, HEAD, CRANK & OUTER END, 6.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25553	COVER, VALVE, SUCTION, 5.5 - 6.0" CYLINDER	2			
8	VRC25554	O-RING, COVER, SUCTION VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
9	VRC25606	RETAINER, VALVE, SUCTION, 5.5 - 6.0" CYLINDER	1			
10	VRC25555	GASKET, SUCTION, VALVE, SEAT, 5.5 - 6.0" CYLINDER	1	1	1	1
11	VRC25603	COVER, VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER	2			
12	VRC25604	O-RING, COVER, DISCHARGE VALVE, 5.5 - 6.0" CYLINDER	2	2	2	2
13	VRC25608	RETAINER, VALVE, DISCHARGE, 6.0" CYLINDER	2			
14	VRC25605	GASKET, DISCHARGE VALVE SEAT, 5.5 - 6.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26615A	VALVE, SUCTION, 5.5 - 6.0" CYLINDER MEDIUM *	1	1		1
17	VRC26625A	VALVE, DISCHARGE, 5.5 - 6.0" CYLINDER MEDIUM *	1	1		1
18	VRC25077	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24114	ROD, PISTON, 3.0 - 3.5" SAHE × 5.5 - 6.0" SACE	1			1
21	VRC24609	PISTON, 6.0 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24601	RING, 6.0 INCH PISTON	4		4	4
23	VRC24602	BAND, RIDER, 6.0 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26699	BLANK, VALVE, DISCHARGE 5.5 - 6.0" SACE CYLINDER	1			
30	VRC25138	CYLINDER, STEEPLE, 3.5" SAHE × 6.0 " SACE	1			
31	VRC27135	HEAD, 3.5" SAHE CYLINDER	1			
32	VRC25352	O-RING, HEAD, CRANK OUTER-END, 3.5" SAHE CYLINDER	1	1	1	1
33	VRC25353	COVER, VALVE, SUCTION, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1			
34	VRC25354	O-RING, COVER, SUCTION VALVE 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
35	VRC25356	RETAINER, VALVE, SUCTION, 3.5" DA & 3.5 SAHE CYLINDER	1			
36	VRC25355	GASKET, SUCTION VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
37	VRC25403	COVER, VALVE, DISCHARGE, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1			
38	VRC25404	O-RING, COVER, DISCHARGE, VALVE, 3.5-4.0"CYLINDER(3.0-3.5SAHE)	1	1	1	1

6.0 × 3.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25183	RETAINER, VALVE DISCHARGE, 3.5" SAHE CYLINDER	1			
40	VRC25405	GASKET, DISCHARGE VALVE SEAT, 3.5 - 4.0" CYLINDER (3.0-3.5 SAHE)	1	1	1	1
41	VRC26115A	VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY & 3.5" MEDIUM SAHE CYLINDER	1	1		1
43	VRC24316	PISTON, 3.5" SAHE × 5.5 - 6.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24351	RING, 3.5 INCH PISTON	4		4	4
45	VRC24352	BAND, RIDER, 3.5 INCH PISTON	1		1	1
46	VRC27136	SPACER, 3.0 - 3.5" SAHE HEAD, 1/4"	1			
47	VRC27137	SPACER, 3.0 - 3.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p> <p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p> <p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						



4.1.13 6.5 x 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

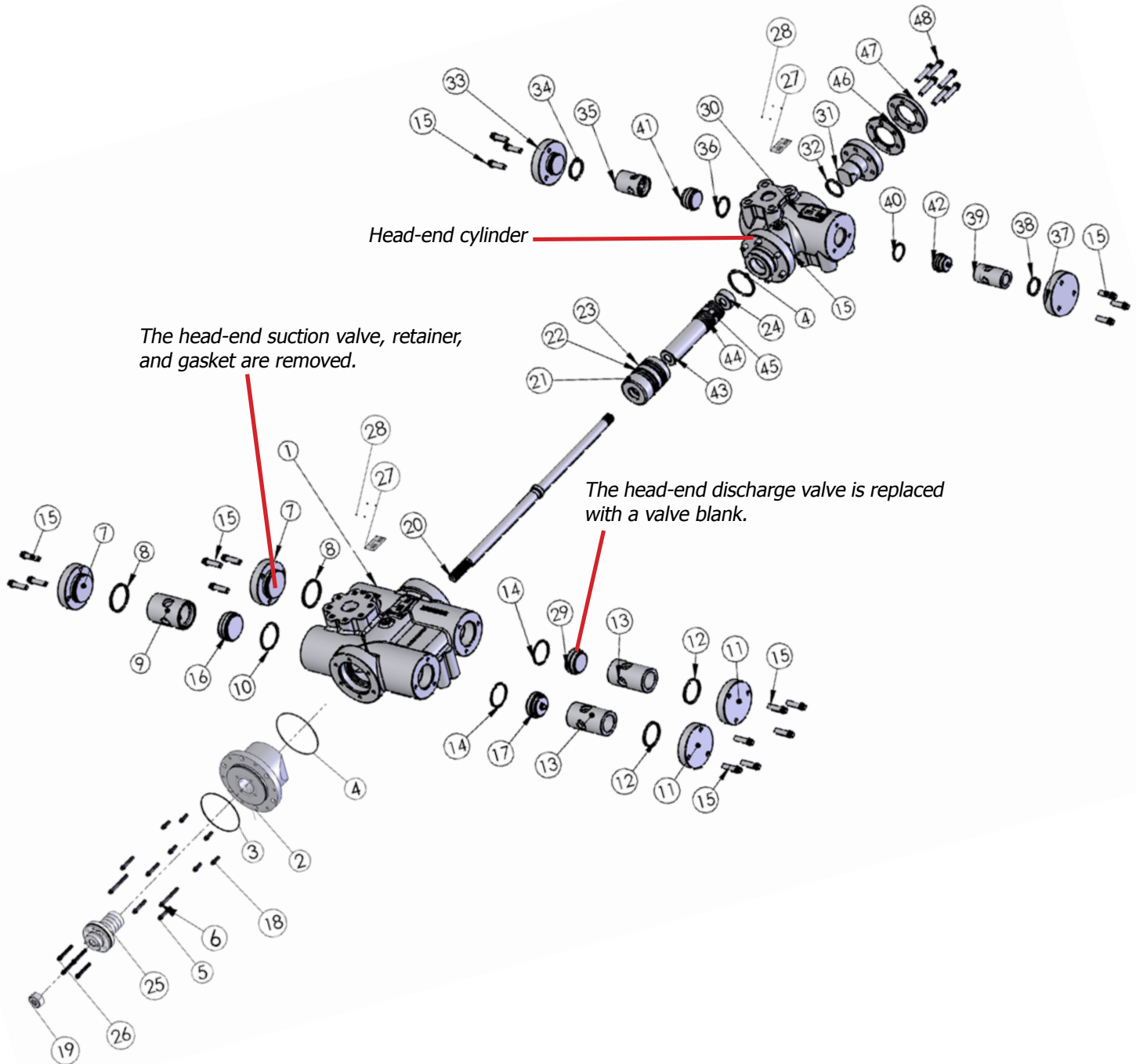
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25141A	CYLINDER, STEEPLE, 4.0" SAHE × 6.5" SACE ASSEMBLY				
1	VRC25650	CYLINDER, 6.5 INCH DA	1			
2	VRC25651	HEAD, CRANK END, 6.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25652	O-RING, HEAD, CRANK & OUTER END, 6.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25656	RETAINER, VALVE, SUCTION, 6.5" CYLINDER	1			
10	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5 - 8.0" CYLINDER	1	2	1	1
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2			
12	VRC25704	O-RING, COVER, DISCHARGE 6.5 - 8.0" CYLINDER	2	2	2	2
13	VRC25658	RETAINER, VALVE, DISCHARGE, 6.5" CYLINDER	2			
14	VRC25705	GASKET, DISCHARGE, VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26715A	VALVE, SUCTION, 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
17	VRC26725A	VALVE, DISCHARGE, 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
18	VRC25067	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24115	ROD, PISTON, 4.0" - 4.5" SAHE × 6.5 - 7.0" SACE	1			1
21	VRC24659	PISTON, 6.5 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC25651	RING, 6.5 INCH PISTON	4		4	4
23	VRC25652	BAND, RIDER, 6.5 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC21606	PIN, NAMEPLATE	8			
29	VRC26799	BLANK, VALVE, DISCHARGE, 6.5 - 7.0" SACE CYLINDER	1			
30	VRC25141	CYLINDER, STEEPLE, 4.0" SAHE × 6.5" SACE	1			
31	VRC27141	HEAD, 4.0" SAHE CYLINDER	1			
32	VRC25402	O-RING, HEAD, CRANK OUTER-END, 4.0" SAHE CYLINDER	1	1	1	1
33	VRC25453	COVER, VALVE, SUCTION 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
34	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
35	VRC25164	RETAINER, VALVE, SUCTION, 4.0" CYLINDER	1			
36	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
37	VRC25503	COVER, VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
38	VRC25504	O-RING, COVER DISCHARGE VALVE, 4.5-5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1

6.5 × 4.0 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25184	RETAINER, VALVE, DISCHARGE, 4.0" SAHE CYLINDER	1			
40	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
41	VRC26215A	VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26225A	VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
43	VRC24410	PISTON, 4.0" SAHE × 6.5 - 7.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24401	RING, 4.0 INCH PISTON	4		4	4
45	VRC24402	BAND, RIDER, 4.0 INCH PISTON	1		1	1
46	VRC27146	SPACER, 4.0 - 4.5" SAHE HEAD, 1/4"	1			
47	VRC27147	SPACER, 4.0 - 4.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD / SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p>						
<p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p>						
<p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						



4.1.14 6.5 x 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

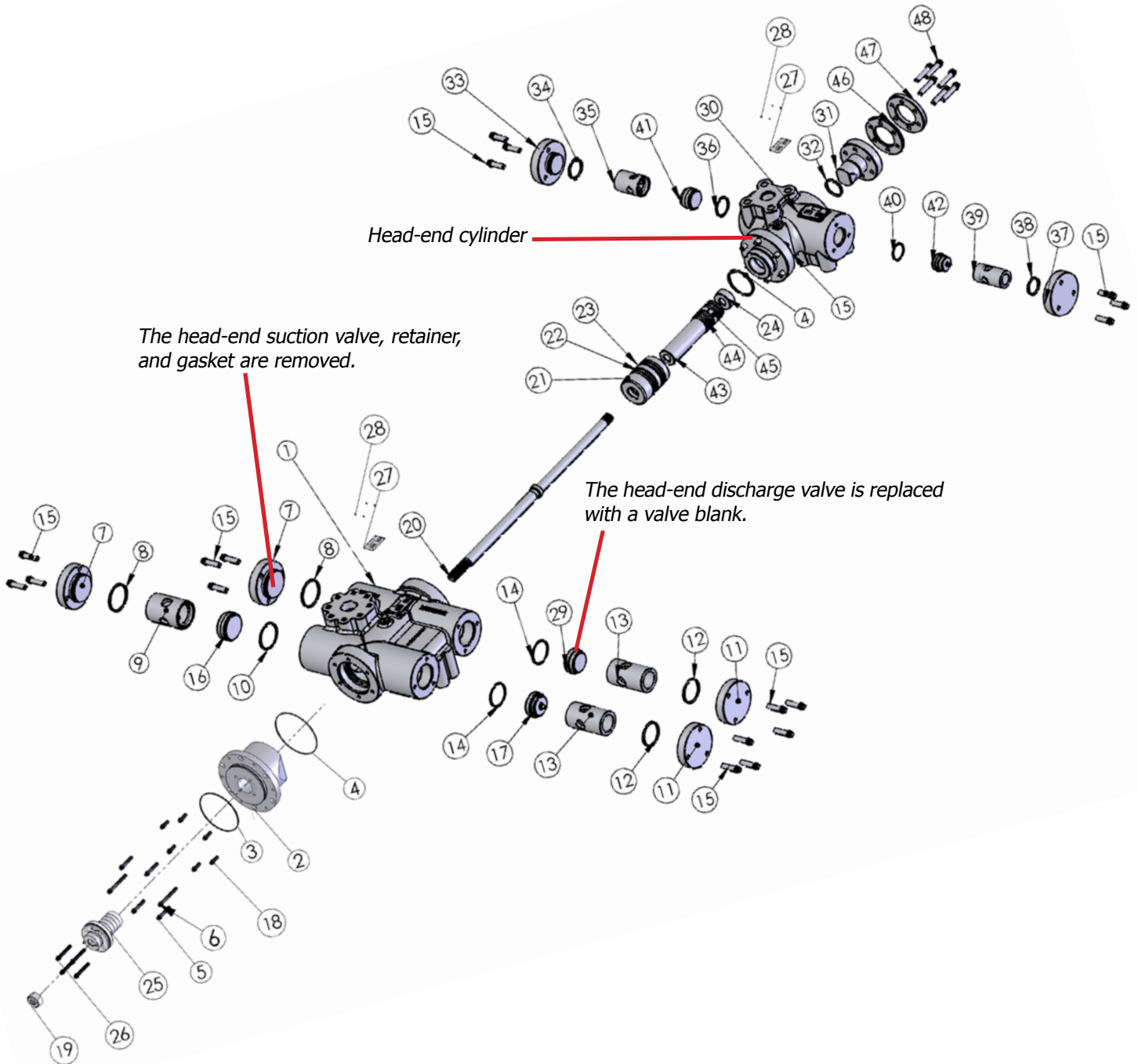
NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25143A	CYLINDER, STEEPLE, 4.5" SAHE × 6.5" SACE ASSEMBLY				
1	VRC25650	CYLINDER, 6.5 INCH DA	1			
2	VRC25651	HEAD, CRANK END, 6.5 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1			2
4	VRC25652	O-RING, HEAD, CRANK & OUTER END, 6.5" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25656	RETAINER, VALVE, SUCTION, 6.5" CYLINDER	1			1
10	VRC25655	GASKET, SUCTION VALVE SEAT, 6.5 - 8.0" CYLINDER	1			
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2	2	2	2
12	VRC25704	O-RING, COVER, DISCHARGE 6.5 - 8.0" CYLINDER	2			
13	VRC25658	RETAINER, VALVE, DISCHARGE, 6.5" CYLINDER	2			1
14	VRC25705	GASKET, DISCHARGE, VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26715A	VALVE, SUCTION, 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
17	VRC26725A	VALVE, DISCHARGE, 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
18	VRC25067	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24115	ROD, PISTON, 4.0" - 4.5" SAHE × 6.5 - 7.0" SACE	1			1
21	VRC24659	PISTON, 6.5 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24651	RING, 6.5 INCH PISTON	4		4	4
23	VRC24652	BAND, RIDER, 6.5 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1			
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26799	BLANK, VALVE, DISCHARGE, 6.5 - 7.0" SACE CYLINDER	1			
30	VRC25143	CYLINDER, STEEPLE 4.5" SAHE × 6.5" SACE	1			
31	VRC27145	HEAD, 4.5" SAHE CYLINDER	1			
32	VRC25452	O-RING, HEAD, CRANK OUTER-END, 4.5" SAHE CYLINDER	1			1
33	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
34	VRC25454	O-RING, COVER, SUCTION VALVE, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			1
35	VRC25165	RETAINER, VALVE, SUCTION, 4.5" SAHE CYLINDER	1			1
36	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5" - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
37	VRC25503	COVER, VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
38	VRC25504	O-RING, COVER, DISCHARGE VALVE, 4.5-5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1

6.5 × 4.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25185	RETAINER, VALVE, DISCHARGE, 4.5" SAHE CYLINDER	1			
40	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
41	VRC26215A	VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26225A	VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
43	VRC24415	PISTON, 4.5" SAHE × 6.5 - 7.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24451	RING, 4.5 INCH PISTON	4		4	4
45	VRC24452	BAND, RIDER, 4.5 INCH PISTON	1		1	1
46	VRC27146	SPACER, 4.0 - 4.5" SAHE HEAD, 1/4"	1			
47	VRC27147	SPACER, 4.0 - 4.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p> <p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p> <p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						



4.1.15 7.0 x 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.

7.0 × 4.0 STEEPLE CYLINDER

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25142A	CYLINDER, STEEPLE, 4.0" SAHE × 7.0" SACE ASSEMBLY				
1	VRC25700	CYLINDER, 7.0 INCH DA	1			
2	VRC25701	HEAD, CRANK END, 7.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25702	O-RING, HEAD, CRANK & OUTER END, 7.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25706	RETAINER, VALVE, SUCTION, 7.0" CYLINDER	1			
10	VRC25655	GASKET, SUCTION, VALVE SEAT, 6.5 - 8.0" CYLINDER	1	1	1	1
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2			
12	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
13	VRC25708	RETAINER, VALVE, DISCHARGE, 7.0" CYLINDER	2			1
14	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26715A	VALVE, SUCTION 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
17	VRC26725A	VALVE, DISCHARGE, 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
18	VRC25067	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24115	ROD, PISTON, 4.0" - 4.5" SAHE × 6.5 - 7.0" SACE	1			1
21	VRC24709	PISTON, 7.0 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24701	RING, 7.0 INCH PISTON	2		2	2
23	VRC24702	BAND, RIDER, 7.0 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26799	BLANK, VALVE, DISCHARGE, 6.5 - 7.0" SACE CYLINDER	1			
30	VRC25142	CYLINDER, STEEPLE, 4.0" SAHE × 7.0" SACE	1			
31	VRC27141	HEAD, 4.0" SAHE CYLINDER	1			
32	VRC25402	O-RING, HEAD, CRANK OUTER-END, 4.0" SAHE CYLINDER	1	1	1	1
33	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
34	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
35	VRC25164	RETAINER, VALVE, SUCTION, 4.0" SAHE CYLINDER	1			
36	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
37	VRC25503	COVER, VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
38	VRC25504	O-RING, COVER DISCHARGE VALVE, 4.5-5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1

7.0 × 4.0 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25184	RETAINER, VALVE, DISCHARGE, 4.0" SAHE CYLINDER	1			
40	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
41	VRC26215A	VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26225A	VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
43	VRC24410	PISTON, 4.0" SAHE × 6.5 - 7.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24401	RING, 4.0 INCH PISTON	4		4	4
45	VRC24402	BAND, RIDER, 4.0 INCH PISTON	1		1	1
46	VRC27146	SPACER, 4.0 - 4.5" SAHE HEAD, 1/4"	1			
47	VRC27147	SPACER, 4.0 - 4.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT AND STEEPLE HEAD/SPACERS, 12 PT	6			

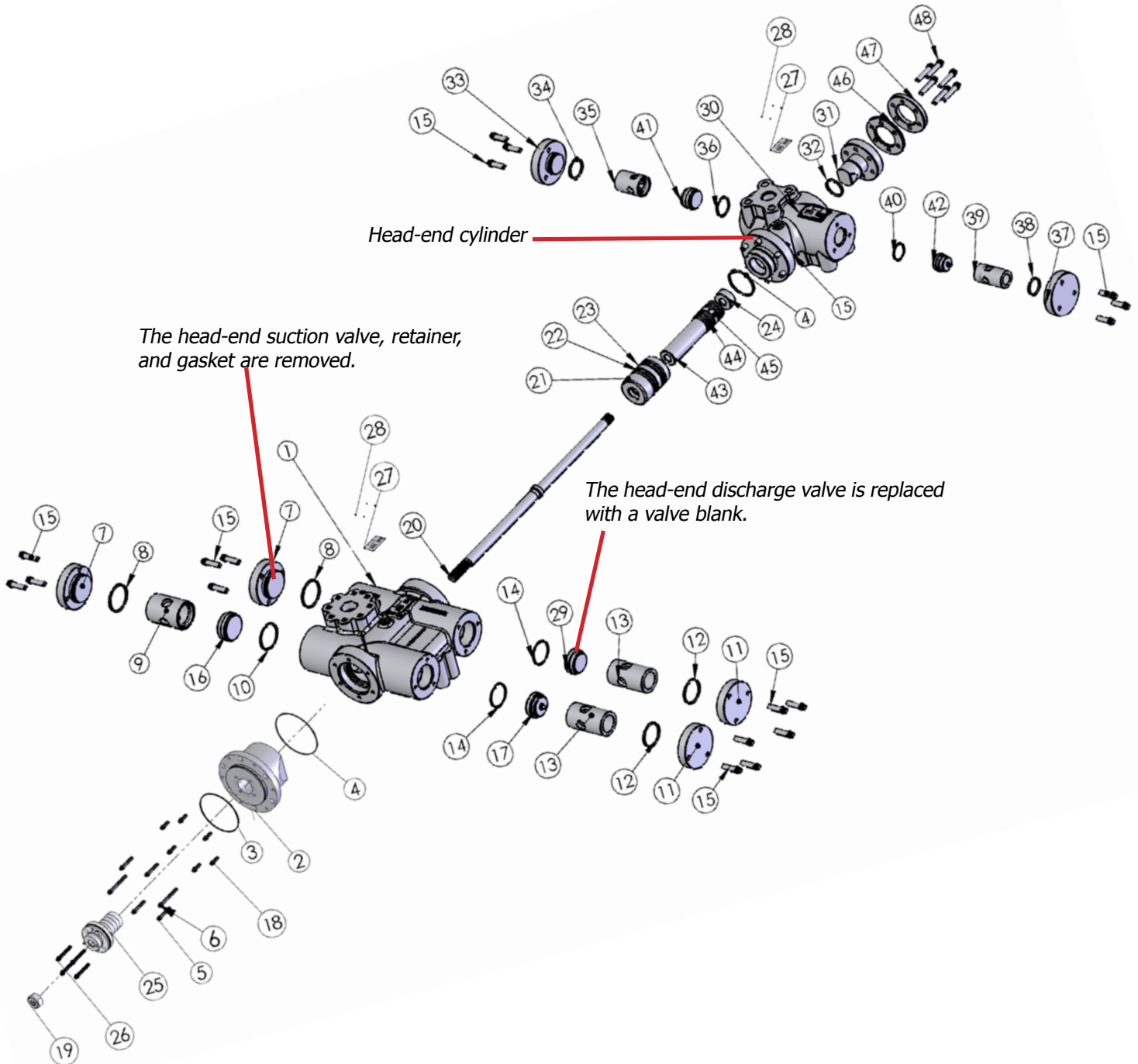
* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".

** A heavier jam nut may be used if required for balancing. See Section 3.4.3.

*** Packing Case Ring Kits are available. See Section 4.2.1.



4.1.16 7.0 x 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.

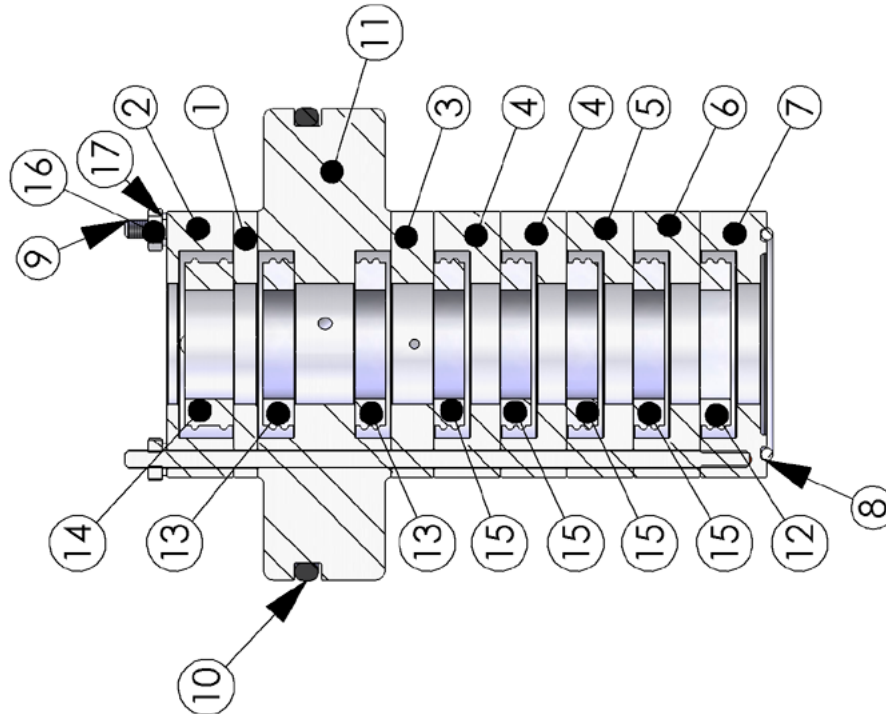
7.0 × 4.5 STEEPLE CYLINDER

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
	VRC25144A	CYLINDER, STEEPLE, 4.5" SAHE × 7.0" SACE ASSEMBLY				
1	VRC25700	CYLINDER, 7.0 INCH DA	1			
2	VRC25701	HEAD, CRANK END, 7.0 INCH CYLINDER	1			
3	VRC25262	O-RING, HEAD, CRANK-END TO FRAME	1	1		1
4	VRC25702	O-RING, HEAD, CRANK & OUTER END, 7.0" CYLINDER	2	1	1	2
5	VRC25027	SCREW, CYLINDER TO FRAME, SHORT, 12 PT	4			
6	VRC25037	SCREW, CYLINDER TO FRAME LONG & CE HEAD, 12 PT	2			
7	VRC25653	COVER, VALVE, SUCTION, 6.5 - 8.0" CYLINDER	2			
8	VRC25654	O-RING, COVER, SUCTION VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
9	VRC25706	RETAINER, VALVE, SUCTION, 7.0" CYLINDER	1			
10	VRC25655	GASKET, SUCTION, VALVE SEAT, 6.5 - 8.0" CYLINDER	1	1	1	1
11	VRC25703	COVER, VALVE, DISCHARGE, 6.5 - 8.0" CYLINDER	2			
12	VRC25704	O-RING, COVER, DISCHARGE VALVE, 6.5 - 8.0" CYLINDER	2	2	2	2
13	VRC25708	RETAINER, VALVE, DISCHARGE, 7.0" CYLINDER	2			
14	VRC25705	GASKET, DISCHARGE VALVE SEAT, 6.5 - 8.0" CYLINDER	2	2	2	2
15	VRC25077	SCREW, VALVE COVER, 12 PT	24			
16	VRC26715A	VALVE, SUCTION 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
17	VRC26725A	VALVE, DISCHARGE, 6.5 - 7.0" CYLINDER MEDIUM *	1	1		1
18	VRC25067	SCREW, HEAD, CRANK-END, 12 PT	6			
19	VRC24909	NUT, JAM, PISTON ROD **	1			1
20	VRC24115	ROD, PISTON, 4.0" - 4.5" SAHE × 6.5" - 7.0" SACE	1			1
21	VRC24709	PISTON, 7.0 INCH SACE STEEPLE CYLINDER, AL	1			1
22	VRC24701	RING, 7.0 INCH PISTON	4		4	4
23	VRC24702	BAND, RIDER, 7.0 INCH PISTON	1		1	1
24	VRC24919	NUT, PISTON	1			1
25	VRC23001A	CASE, PACKING ASSEMBLY ***	1		1	
26	VRC23107	SCREW, PACKING CASE, 12 PT	4			
27	VRC25100	NAMEPLATE, VRC CYLINDER	2			
28	VRC 21606	PIN, NAMEPLATE	8			
29	VRC26799	BLANK, VALVE, DISCHARGE, 6.5 - 7.0" SACE CYLINDER	1			
30	VRC25144	CYLINDER, STEEPLE, 4.5" SAHE × 7.0" SACE	1			
31	VRC27145	HEAD, 4.5" SAHE CYLINDER	1			
32	VRC25452	O-RING, HEAD, CRANK OUTER- END +4.5" SAHE CYLINDER	1	1	1	1
33	VRC25453	COVER, VALVE, SUCTION, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
34	VRC25454	O-RING, COVER, SUCTION VALVE 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
35	VRC25165	RETAINER, VALVE, SUCTION, 4.5" SAHE CYLINDER	1			
36	VRC25455	GASKET, SUCTION VALVE SEAT, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
37	VRC25503	COVER, VALVE, DISCHARGE, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1			
38	VRC25504	O-RING, COVER DISCHARGE VALVE, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1

7.0 × 4.5 STEEPLE CYLINDER (continued)

NUMBER	PART NUMBER	DESCRIPTION OF PART	PART QTY.	RECOMMENDED SPARE PARTS		
				6 MONTHS	1 YEAR	2 YEARS
39	VRC25185	RETAINER, VALVE, DISCHARGE, 4.5" SAHE CYLINDER	1			
40	VRC25505	GASKET, DISCHARGE VALVE SEAT, 4.5 - 5.0" CYLINDER (4.0-4.5 SAHE)	1	1	1	1
41	VRC26215A	VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
42	VRC26225A	VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER MEDIUM *	1	1		1
43	VRC24415	PISTON, 4.5" SAHE × 6.5 - 7.0" SACE STEEPLE CYLINDER, AL	1			1
44	VRC24451	RING, 4.5 INCH PISTON	4		4	4
45	VRC24452	BAND, RIDER, 4.5 INCH PISTON	1		1	1
46	VRC27146	SPACER, 4.0 - 4.5" SAHE HEAD, 1/4"	1			
47	VRC27147	SPACER, 4.0 - 4.5" SAHE HEAD, 1/2"	1			
48	VRC25027	SCREW, CYLINDER TO FRAME, SHORT STEEPLE HEAD / SPACERS, 12 PT	6			
<p>* Actual site gas conditions may require "LIGHT" or "HEAVY" valve springs. See section 5 "Valve Parts".</p> <p>** A heavier jam nut may be used if required for balancing. See Section 3.4.3.</p> <p>*** Packing Case Ring Kits are available. See Section 4.2.1.</p>						

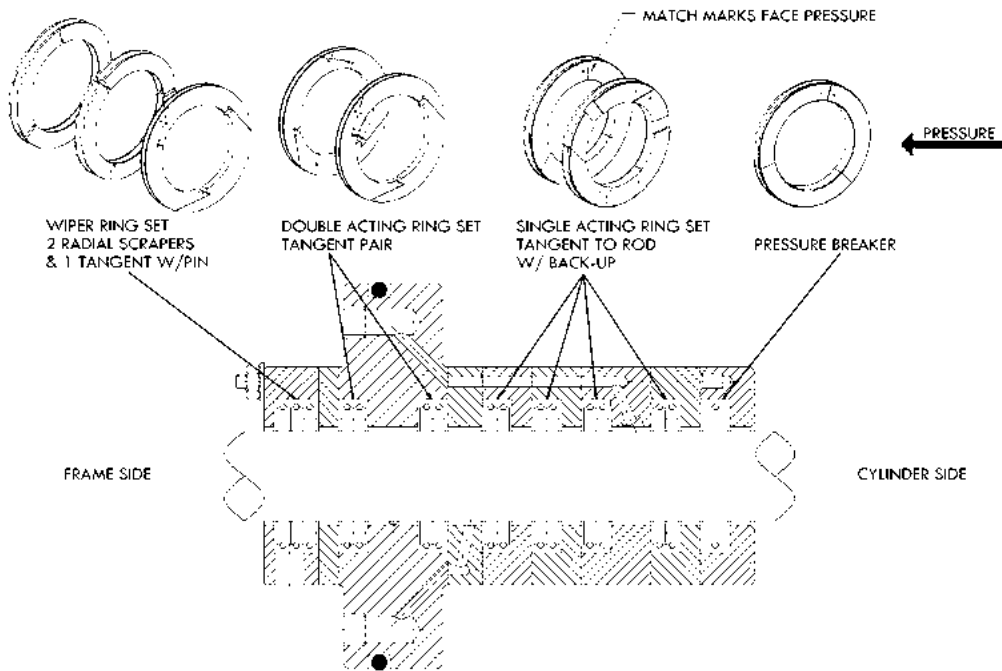
4.2 Pressure Packing, Piston Rod for Steeple Cylinders



PISTON ROD PACKING CASE

NUMBER	PART NUMBER	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

4.2.1 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 NUMBER	DESCRIPTION OF PART	QTY.
VRC23001A	CASE, PACKING ASSEMBLY , COMPLETE	1
VRC23501	RING KIT, PACKING RENEWAL W/ PARTS INCLUDE: O-RING, NOSE GASKET, NUTS AND WASHERS	1 (Kit)
VRC23551	RING KIT, PACKING RENEWAL RINGS ONLY	1 (Kit)

4.3 Cylinder O-Ring & Gasket Kits – Steeple Cylinders

CYLINDER O-RING & GASKET KITS – STEEPLE

PART NUMBER	DESCRIPTION OF PART	QTY.
VRC25121K	O-RING & GASKET KIT, 2.25" SAHE × 3.5" SACE, STEEPLE CYLINDER	1
VRC25122K	O-RING & GASKET KIT, 2.25" SAHE × 4.0" SACE, STEEPLE CYLINDER	1
VRC25124K	O-RING & GASKET KIT, 2.5" SAHE × 4.5" SACE, STEEPLE CYLINDER	1
VRC25131K	O-RING & GASKET KIT, 3.0" SAHE × 4.5" SACE, STEEPLE CYLINDER	1
VRC25135K	O-RING & GASKET KIT, 3.5" SAHE × 4.5" SACE, STEEPLE CYLINDER	1
VRC25125K	O-RING & GASKET KIT, 2.5" SAHE × 5.0" SACE, STEEPLE CYLINDER	1
VRC25132K	O-RING & GASKET KIT, 3.0" SAHE × 5.0" SACE, STEEPLE CYLINDER	1
VRC25136K	O-RING & GASKET KIT, 3.5" SAHE × 5.0" SACE, STEEPLE CYLINDER	1
VRC25133K	O-RING & GASKET KIT, 3.0" SAHE × 5.5" SACE, STEEPLE CYLINDER	1
VRC25137K	O-RING & GASKET KIT, 3.5" SAHE × 5.5" SACE, STEEPLE CYLINDER	1
VRC25134K	O-RING & GASKET KIT, 3.0" SAHE × 6.0" SACE, STEEPLE CYLINDER	1
VRC25138K	O-RING & GASKET KIT, 3.5" SAHE × 6.0" SACE, STEEPLE CYLINDER	1
VRC25141K	O-RING & GASKET KIT, 4.0" SAHE × 6.5" SACE, STEEPLE CYLINDER	1
VRC25143K	O-RING & GASKET KIT, 4.5" SAHE × 6.5" SACE, STEEPLE CYLINDER	1
VRC25142K	O-RING & GASKET KIT, 4.0" SAHE × 7.0" SACE, STEEPLE CYLINDER	1
VRC25144K	O-RING & GASKET KIT, 4.5" SAHE × 7.0" SACE, STEEPLE CYLINDER	1

All Steeple Cylinder O-Rings and Gasket Kits include:

- 1 - O-Ring, Head, Crank-End to Frame
- 2 - O-Rings, Head, Crank & 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

4.4 Steeple Cylinder and Piston/Rod Assemblies

STEEPLE CYLINDER & PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)

PART NUMBER	DESCRIPTION OF PART	QTY.
3.5 × 2.25 STEEPLE CYLINDER AND PISTON / ROD		
VRC25121A	CYLINDER, STEEPLE, 2.25" SAHE × 3.5" SACE, ASSEMBLY	1
VRC24121A-CI/AL	PISTON & ROD ASSEMBLY, 3.5"CI/2.25"AL STEEPLE CYLINDER (20.20#)	1
4.0 × 2.25 STEEPLE CYLINDER AND PISTON / ROD		
VRC25122A	CYLINDER, STEEPLE, 2.25" SAHE × 4.0" SACE, ASSEMBLY	1
VRC24122A-CI/AL	PISTON & ROD ASSEMBLY, 4.0"CI/2.25"AL STEEPLE CYLINDER (23.53#)	1
4.5 × 2.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25124A	CYLINDER, STEEPLE, 2.5" SAHE × 4.5" SACE, ASSEMBLY	1
VRC24124A-AL/AL	PISTON & ROD ASSEMBLY, 4.5"AL/2.5"AL STEEPLE CYLINDER (18.09#)	1
4.5 × 3.0 STEEPLE CYLINDER AND PISTON / ROD		
VRC25131A	CYLINDER, STEEPLE, 3.0" SAHE × 4.5" SACE, ASSEMBLY	1
VRC24131A-AL/AL	PISTON & ROD ASSEMBLY, 4.5"AL/3.0"AL STEEPLE CYLINDER (19.00#)	1
4.5 × 3.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25135A	CYLINDER, STEEPLE, 3.5" SAHE × 4.5" ASSEMBLY	1
VRC24135A-AL/AL	PISTON & ROD ASSEMBLY, 4.5"AL/3.5"AL STEEPLE CYLINDER (20.15#)	1
5.0 × 2.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25125A	CYLINDER, STEEPLE, 2.5" SAHE × 5.0" SACE, ASSEMBLY	1
VRC24125A-AL/AL	PISTON & ROD ASSEMBLY, 5.0"AL/2.5"AL STEEPLE CYLINDER (19.21#)	1
5.0 × 3.0 STEEPLE CYLINDER AND PISTON / ROD		
VRC25132A	CYLINDER, STEEPLE, 3.0" SAHE × 5.0" SACE, ASSEMBLY	1
VRC24132A-AL/AL	PISTON & ROD ASSEMBLY, 5.0"AL/3.0"AL STEEPLE CYLINDER (20.68#)	1
VRC24132A-CI/AL	PISTON & ROD ASSEMBLY, 5.0"CI/3.0"AL STEEPLE CYLINDER (33.31#)	1
All Piston/Rod Assemblies include:		
<ul style="list-style-type: none"> 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 & PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)

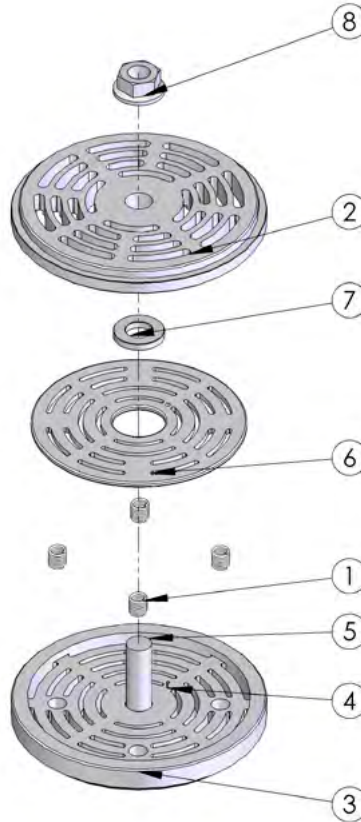
PART NUMBER	DESCRIPTION OF PART	QTY.
5.0 × 3.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25136A	CYLINDER, STEEPLE, 3.5" SAHE × 5.0" SACE, ASSEMBLY	1
VRC24136A-AL/AL	PISTON & ROD ASSEMBLY, 5.0"AL/3.5"AL STEEPLE CYLINDER (21.83#)	1
VRC24136A-CI/AL	PISTON & ROD ASSEMBLY, 5.0"CI/3.5"AL STEEPLE CYLINDER (34.46#)	1
5.5 × 3.0 STEEPLE CYLINDER AND PISTON / ROD		
VRC25133A	CYLINDER, STEEPLE, 3.0" SAHE × 5.5" SACE, ASSEMBLY	1
VRC24133A-AL/AL	PISTON & ROD ASSEMBLY, 5.5"AL/3.0"AL STEEPLE CYLINDER (22.61#)	1
5.5 × 3.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25137A	CYLINDER, STEEPLE, 3.5" SAHE × 5.5" SACE, ASSEMBLY	1
VRC24137A-AL/AL	PISTON & ROD ASSEMBLY, 5.5"AL/3.5"AL STEEPLE CYLINDER (23.79#)	1
6.0 × 3.0 STEEPLE CYLINDER AND PISTON / ROD		
VRC25134A	CYLINDER, STEEPLE, 3.0" SAHE × 6.0" SACE, ASSEMBLY	1
VRC24134A-AL/AL	PISTON & ROD ASSEMBLY, 6.0"AL/3.0"AL STEEPLE CYLINDER (24.07#)	1
6.0 × 3.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25138A	CYLINDER, STEEPLE, 3.5" SAHE × 6.0" SACE, ASSEMBLY	1
VRC24138A-AL/AL	PISTON & ROD ASSEMBLY, 6.0"AL/3.5"AL STEEPLE CYLINDER (25.25#)	1
6.5 × 4.0 STEEPLE CYLINDER AND PISTON / ROD		
VRC25141A	CYLINDER, STEEPLE, 6.5" SAHE × 4.0" SACE, ASSEMBLY	1
VRC24141A-AL/AL	PISTON & ROD ASSEMBLY, 6.5"AL/4.0"AL STEEPLE CYLINDER (30.31#)	1
6.5 × 4.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25143A	CYLINDER, STEEPLE, 4.5" SAHE × 6.5" SACE, ASSEMBLY	1
VRC24143A-AL/AL	PISTON & ROD ASSEMBLY, 6.5"AL/4.5"AL STEEPLE CYLINDER (33.67#)	1
<p>* All Piston/Rod Assemblies include:</p> <ul style="list-style-type: none"> Pistons Piston Rod Piston Rings Rider Bands Piston Nut Piston Rod Jam Nut (Standard)* 		
<p>* A Heavier Jam Nut may be required for balancing.</p>		

STEEPLE CYLINDER & PISTON/ROD ASSEMBLIES (RECIPROCATING WEIGHT)

PART NUMBER	DESCRIPTION OF PART	QTY.
7.0 × 4.0 STEEPLE CYLINDER AND PISTON / ROD		
VRC25142A	CYLINDER, STEEPLE, 4.0" SAHE × 7.0" SACE, ASSEMBLY	1
VRC24142A-AL/AL	PISTON & ROD ASSEMBLY, 7.0"AL/4.0"AL STEEPLE CYLINDER (21.83#)	1
7.0 × 4.5 STEEPLE CYLINDER AND PISTON / ROD		
VRC25144A	CYLINDER, STEEPLE, 4.5" SAHE × 7.0" SACE, ASSEMBLY	1
VRC24144A-AL/AL	PISTON & ROD ASSEMBLY, 7.0"AL/4.5"AL STEEPLE CYLINDER (35.13#)	1
<p>All Piston/Rod Assemblies include:</p> <ul style="list-style-type: none"> <i>Pistons</i> <i>Piston Rod</i> <i>Piston Rings</i> <i>Rider Bands</i> <i>Piston Nut</i> <i>Piston Rod Jam Nut (Standard)*</i> 		
<p>* A Heavier Jam Nut may be required for balancing.</p>		

VALVE PARTS, KITS AND ASSEMBLIES

5.1 Valve Parts for Double Acting Cylinders - Suction Valves



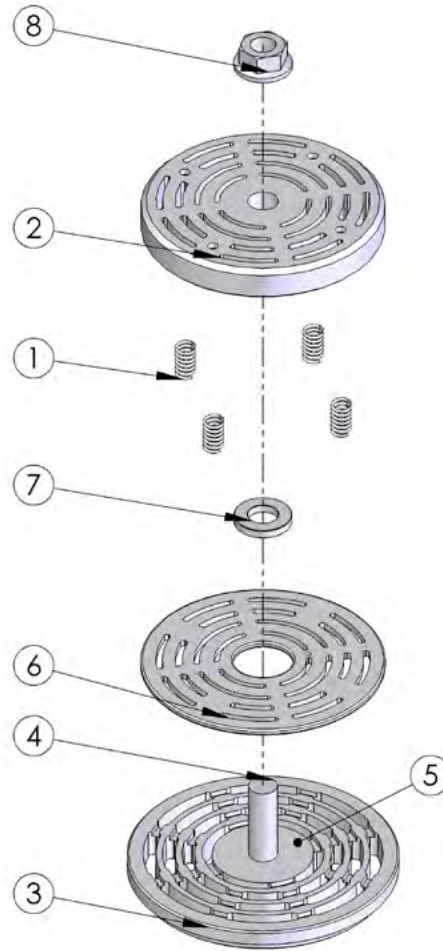
NOTE: Arrow Valve Repair Kits do not include valve seat gaskets. It is recommended that new valve seat gaskets be used every time a valve is installed. Refer to the specific cylinder size assembly parts list for "Gasket, Suction & Discharge Valve Seat" part numbers.

TYPICAL SUCTION VALVE PARTS

NUMBER	PART NUMBER	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 5.5.

5.2 Valve Parts for Double Acting Cylinders - Discharge Valves



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 & Discharge Valve Seat" part numbers.

TYPICAL DISCHARGE VALVE PARTS

NUMBER	PART NUMBER	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 5.5.

5.3 Valve Assemblies For Double Acting & SACE Steeple Cylinders

VALVE ASSEMBLIES – DOUBLE ACTING & SACE STEEPLE CYLINDERS *

SPRING WEIGHT	PART NUMBER	DESCRIPTION OF PART	QTY.
2.5 and 3.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26311A	VALVE, SUCTION, 2.5-3.0" CYLINDER LIGHT	2
MEDIUM/LIGHT	VRC26313A	VALVE, SUCTION, 2.5-3.0" CYLINDER MEDIUM/LIGHT	2
MEDIUM *	VRC26315A	VALVE, SUCTION, 2.5-3.0" CYLINDER MEDIUM	2
HEAVY	VRC26317A	VALVE, SUCTION, 2.5-3.0" CYLINDER HEAVY	2
2.5 and 3.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26321A	VALVE, DISCHARGE, 2.5-3.0" CYLINDER LIGHT	2
MEDIUM/LIGHT	VRC26323A	VALVE, DISCHARGE, 2.5-3.0" CYLINDER MEDIUM/LIGHT	2
MEDIUM *	VRC26325A	VALVE, DISCHARGE, 2.5-3.0" CYLINDER MEDIUM	2
HEAVY	VRC26327A	VALVE, DISCHARGE, 2.5-3.0" HEAVY	2
3.5 and 4.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26411A	VALVE, SUCTION, 3.5-4.0" CYLINDER LIGHT	2
MEDIUM *	VRC26415A	VALVE, SUCTION, 3.5-4.0" MEDIUM	2
HEAVY	VRC26417A	VALVE, SUCTION, 3.5-4.0" HEAVY	2
3.5 and 4.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26421A	VALVE, DISCHARGE, 3.5-4.0" CYLINDER LIGHT	2
MEDIUM *	VRC26425A	VALVE, DISCHARGE, 3.5-4.0" CYLINDER MEDIUM	2
HEAVY	VRC26427A	VALVE, DISCHARGE, 3.5-4.0" HEAVY	2
4.5 and 5.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26511A	VALVE, SUCTION, 4.5-5.0" CYLINDER LIGHT	2
MEDIUM *	VRC26515A	VALVE, SUCTION, 4.5-5.0" CYLINDER MEDIUM	2
HEAVY	VRC26517A	VALVE, SUCTION, 4.5-5.0" HEAVY	2
4.5 and 5.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26521A	VALVE, DISCHARGE, 4.5-5.0" CYLINDER LIGHT	2
MEDIUM/LIGHT	VRC26523A	VALVE, DISCHARGE, 4.5-5.0" CYLINDER MEDIUM/LIGHT	2
MEDIUM *	VRC26525A	VALVE, DISCHARGE, 4.5-5.0" CYLINDER MEDIUM	2
HEAVY	VRC26527A	VALVE, DISCHARGE, 4.5-5.0" CYLINDER HEAVY	2
* As a standard, Arrow provides valves with "Medium" springs. The springs can be light, medium light, medium, or heavy, depending on the operating conditions. Contact Arrow Engine Company if you need replacement parts.			

VALVE ASSEMBLIES – DOUBLE ACTING & SACE STEEPLE CYLINDERS *

SPRING WEIGHT	PART NUMBER*	DESCRIPTION OF PART	QTY.
5.5 and 6.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26611A	VALVE, SUCTION, 5.5-6.0" CYLINDER LIGHT	2
MEDIUM/LIGHT	VRC26613A	VALVE, SUCTION, 5.5-6.0" CYLINDER MEDIUM/LIGHT	2
MEDIUM *	VRC26615A	VALVE, SUCTION, 5.5-6.0" CYLINDER MEDIUM	2
HEAVY	VRC26617A	VALVE, SUCTION, 5.5-6.0" CYLINDER HEAVY	2
5.5 and 6.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26621A	VALVE, DISCHARGE, 5.5-6.0" CYLINDER LIGHT	2
MEDIUM *	VRC26625A	VALVE, DISCHARGE, 5.5-6.0" CYLINDER MEDIUM	2
HEAVY	VRC26627A	VALVE, DISCHARGE, 5.5-6.0" CYLINDER HEAVY	2
6.5 and 7.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26711A	VALVE, SUCTION, 6.5-7.0" CYLINDER LIGHT	2
MEDIUM *	VRC26715A	VALVE, SUCTION, 6.5-7.0" CYLINDER MEDIUM	2
HEAVY	VRC26717A	VALVE, SUCTION, 6.5-7.0" CYLINDER HEAVY	2
6.5 and 7.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26721A	VALVE, DISCHARGE, 6.5-7.0" CYLINDER LIGHT	2
MEDIUM *	VRC26725A	VALVE, DISCHARGE, 6.5-7.0" CYLINDER MEDIUM	2
HEAVY	VRC26727A	VALVE, DISCHARGE, 6.5-7.0" CYLINDER HEAVY	2
7.5 and 8.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26811A	VALVE, SUCTION, 6.5-7.0" CYLINDER LIGHT	2
MEDIUM *	VRC26815A	VALVE, SUCTION, 6.5-7.0" CYLINDER MEDIUM	2
HEAVY	VRC26817A	VALVE, SUCTION, 6.5-7.0" CYLINDER HEAVY	2
7.5 and 8.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26821A	VALVE, DISCHARGE, 7.5-8.0" CYLINDER LIGHT	2
MEDIUM *	VRC26825A	VALVE, DISCHARGE, 7.5-8.0" CYLINDER MEDIUM	2
HEAVY	VRC26827A	VALVE, DISCHARGE, 7.5-8.0" CYLINDER HEAVY	2
<p>* As a standard, Arrow provides valves with "Medium" springs. The springs can be light, medium light, medium, or heavy, depending on the operating conditions. Contact Arrow Engine Company if you need replacement parts.</p>			

5.4 Valve Assemblies for SAHE Steeple Cylinders

VALVE ASSEMBLIES – SAHE STEEPLE CYLINDERS *

Spring Weight	PART NUMBER*	DESCRIPTION	QTY
2.25 and 2.5 STEEPLE CYLINDER SUCTION VALVES			
LIGHT	VRC26011A	VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26015A	VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26017A	VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER HEAVY	1
2.25 and 2.5 STEEPLE CYLINDER DISCHARGE VALVES			
LIGHT	VRC26021A	VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26025A	VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26027A	VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER HEAVY	1
3.0 and 3.5 STEEPLE CYLINDER SUCTION VALVE			
LIGHT	VRC26111A	VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26115A	VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26117A	VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER HEAVY	1
3.0 and 3.5 STEEPLE CYLINDER DISCHARGE VALVE			
LIGHT	VRC26121A	VALVE, DISCHARGE, 3.0" SAHE CYLINDER LIGHT	1
MEDIUM/LIGHT *	VRC26123A	VALVE, DISCHARGE, 3.0" MEDIUM & 3.5" LIGHT SAHE CYLINDER	1
MEDIUM/HEAVY *	VRC26125A	VALVE, DISCHARGE, 3.0" HEAVY. & 3.5 MEDIUM SAHE CYLINDER	1
HEAVY	VRC26127A	VALVE, DISCHARGE, 3.5" SAHE CYLINDER HEAVY	1
4.0 and 4.5 STEEPLE CYLINDER SUCTION VALVE			
LIGHT	VRC26211A	VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26215A	VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26217A	VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER HEAVY	1
4.0 and 4.5 STEEPLE CYLINDER DISCHARGE VALVE			
LIGHT	VRC26221A	VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26225A	VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26227A	VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER HEAVY	1
* As a standard, Arrow provides valves with "Medium" springs. The springs can be light, medium light, medium, or heavy, depending on the operating conditions. Contact Arrow Engine Company if you need replacement parts.			

5.5 Valve Repair Kits

5.5.1 Valve Repair Kits for Double Acting & SACE Steeple Cylinders

VALVE REPAIR KIT – DOUBLE ACTING AND SACE STEEPLE CYLINDERS

SPRING WEIGHT	PART NUMBER	DESCRIPTION OF PART	QTY.
2.5 and 3.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26311K	KIT, VALVE, SUCTION, 2.5-3.0" CYLINDER LIGHT	1
MEDIUM/LIGHT	VRC26313K	KIT, VALVE, SUCTION, 2.5-3.0" CYLINDER MEDIUM/LIGHT	1
MEDIUM *	VRC26315K	KIT, VALVE, SUCTION, 2.5-3.0" CYLINDER MEDIUM	1
HEAVY	VRC26317K	KIT, VALVE, SUCTION, 2.5-3.0" CYLINDER HEAVY	1
2.5 and 3.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26321K	KIT, VALVE, DISCHARGE, 2.5-3.0" CYLINDER LIGHT	1
MEDIUM/LIGHT	VRC26323K	KIT, VALVE, DISCHARGE, 2.5-3.0" CYLINDER MEDIUM/LIGHT	1
MEDIUM *	VRC26325K	KIT, VALVE, DISCHARGE, 2.5-3.0" CYLINDER MEDIUM	1
HEAVY	VRC26327K	KIT, VALVE, DISCHARGE, 2.5-3.0" HEAVY	1
3.5 and 4.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26411K	KIT, VALVE, SUCTION, 3.5-4.0" CYLINDER LIGHT	1
MEDIUM *	VRC26415K	KIT, VALVE, SUCTION, 3.5-4.0" MEDIUM	1
HEAVY	VRC26417K	KIT, VALVE, SUCTION, 3.5-4.0" HEAVY	1
3.5 and 4.0 INCH DOUBLE ACTING and SACE - DISCHARGE			
LIGHT	VRC26421K	KIT, VALVE, DISCHARGE, 3.5-4.0" CYLINDER LIGHT	1
MEDIUM *	VRC26425K	KIT, VALVE, DISCHARGE, 3.5-4.0" CYLINDER MEDIUM	1
HEAVY	VRC26427K	KIT, VALVE, DISCHARGE, 3.5-4.0" HEAVY	1
4.5 and 5.0 INCH DOUBLE ACTING and SACE - SUCTION			
LIGHT	VRC26511K	KIT, VALVE, SUCTION, 4.5-5.0" CYLINDER LIGHT	1
MEDIUM *	VRC26515K	KIT, VALVE, SUCTION, 4.5-5.0" CYLINDER MEDIUM	1
HEAVY	VRC26517K	KIT, VALVE, SUCTION, 4.5-5.0" HEAVY	1
4.5 and 5.0 INCH DOUBLE ACTING and SACE - DISCHARGE			
LIGHT	VRC26521K	KIT, VALVE, DISCHARGE, 4.5-5.0" CYLINDER LIGHT	1
MEDIUM/LIGHT	VRC26523K	KIT, VALVE, DISCHARGE, 4.5-5.0" CYLINDER MEDIUM/LIGHT	1
MEDIUM *	VRC26525K	KIT, VALVE, DISCHARGE, 4.5-5.0" CYLINDER MEDIUM	1
HEAVY	VRC26527K	KIT, VALVE, DISCHARGE, 4.5-5.0" CYLINDER HEAVY	1

* As a standard, Arrow provides valves with "Medium" springs. The springs can be light, medium light, medium, or heavy, depending on the operating conditions. Contact Arrow Engine Company if you need replacement parts.

NOTE: Each valve repair kit contains the normal wear parts to repair one valve and consists of :

- 1 - Plate, Valve
- 1 - Spring, Valve, set (complete set of 3-6 springs as required for the specific valve.)
- 1 - Nut, Lock
- 1 - Ring, Guide
- 1 - Pin, Locating

NOTE: Part numbers are specific to each model valve depending on what size cylinder they are for.

NOTE: Valve Repair Kits do not include valve seat gaskets.

VALVE REPAIR KIT – DOUBLE ACTING AND SACE STEEPLE CYLINDERS

SPRING WEIGHT	PART NUMBER	DESCRIPTION OF PART	QTY.
5.5 and 6.0 INCH DOUBLE ACTING and SACE - SUCTION			
LIGHT	VRC26611K	KIT, VALVE, SUCTION, 5.5-6.0" CYLINDER LIGHT	1
MEDIUM/LIGHT	VRC26613K	KIT, VALVE, SUCTION, 5.5-6.0" CYLINDER MEDIUM/LIGHT	1
MEDIUM *	VRC26615K	KIT, VALVE, SUCTION, 5.5-6.0" CYLINDER MEDIUM	1
HEAVY	VRC26617K	KIT, VALVE, SUCTION, 5.5-6.0" CYLINDER HEAVY	1
5.5 and 6.0 INCH DOUBLE ACTING and SACE - DISCHARGE			
LIGHT	VRC26621K	KIT, VALVE, DISCHARGE, 5.5-6.0" CYLINDER LIGHT	1
MEDIUM *	VRC26625K	KIT, VALVE, DISCHARGE, 5.5-6.0" CYLINDER MEDIUM	1
HEAVY	VRC26627K	KIT, VALVE, DISCHARGE, 5.5-6.0" CYLINDER HEAVY	1
6.5 and 7.0 INCH DOUBLE ACTING and SACE - SUCTION			
LIGHT	VRC26711K	KIT, VALVE, SUCTION, 6.5-7.0" CYLINDER LIGHT	1
MEDIUM *	VRC26715K	KIT, VALVE, SUCTION, 6.5-7.0" CYLINDER MEDIUM	1
HEAVY	VRC26717K	KIT, VALVE, SUCTION, 6.5-7.0" CYLINDER HEAVY	1
6.5 and 7.0 INCH DOUBLE ACTING and SACE - DISCHARGE			
LIGHT	VRC26721K	KIT, VALVE, DISCHARGE, 6.5-7.0" CYLINDER LIGHT	1
MEDIUM *	VRC26725K	KIT, VALVE, DISCHARGE, 6.5-7.0" CYLINDER MEDIUM	1
HEAVY	VRC26727K	KIT, VALVE, DISCHARGE, 6.5-7.0" CYLINDER HEAVY	1
7.5 and 8.0 INCH DOUBLE ACTING - SUCTION			
LIGHT	VRC26811K	KIT, VALVE, SUCTION, 7.5-8.0" CYLINDER LIGHT	1
MEDIUM *	VRC26815K	KIT, VALVE, SUCTION, 7.5-8.0" CYLINDER MEDIUM	1
HEAVY	VRC26817K	KIT, VALVE, SUCTION, 7.5-8.0" CYLINDER HEAVY	1
7.5 and 8.0 INCH DOUBLE ACTING - DISCHARGE			
LIGHT	VRC26821K	KIT, VALVE, DISCHARGE, 7.5-8.0" CYLINDER LIGHT	1
MEDIUM *	VRC26825K	KIT, VALVE, DISCHARGE, 7.5-8.0" CYLINDER MEDIUM	1
HEAVY	VRC26827K	KIT, VALVE, DISCHARGE, 7.5-8.0" CYLINDER HEAVY	1

* As a standard, Arrow provides valves with "Medium" springs. The springs can be light, medium light, medium, or heavy, depending on the operating conditions. Contact Arrow Engine Company if you need replacement parts.

NOTE: Each valve repair kit contains the normal wear parts to repair one valve and consists of :

- 1 - Plate, Valve
- 1 - Spring, Valve, set (complete set of 3-6 springs as required for the specific valve.)
- 1 - Nut, Lock
- 1 - Ring, Guide
- 1 - Pin, Locating

NOTE: Part numbers are specific to each model valve depending on what size cylinder they are for.

NOTE: Valve Repair Kits do not include valve seat gaskets.

5.5.2 Valve Repair Kits for SAHE Steeple Cylinders

VALVE REPAIR KIT – SAHE STEEPLER CYLINDERS

SPRING WEIGHT	PART NUMBER	DESCRIPTION OF PART	QTY.
2.25 and 2.5 STEEPLER CYLINDERS - SUCTION			
LIGHT	VRC26011K	KIT, VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26015K	KIT, VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26017K	KIT, VALVE, SUCTION, 2.25" & 2.5" SAHE CYLINDER HEAVY	1
2.25 and 2.5 STEEPLER CYLINDERS - DISCHARGE			
LIGHT	VRC26021K	KIT, VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26025K	KIT, VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26027K	KIT, VALVE, DISCHARGE, 2.25" & 2.5" SAHE CYLINDER HEAVY	1
3.0 and 3.5 STEEPLER CYLINDERS - SUCTION			
LIGHT	VRC26111K	KIT, VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26115K	KIT, VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26117K	KIT, VALVE, SUCTION, 3.0" & 3.5" SAHE CYLINDER HEAVY	1
3.0 and 3.5 STEEPLER CYLINDERS - DISCHARGE			
LIGHT	VRC26121K	KIT, VALVE, DISCHARGE, 3.0" SAHE CYLINDER LIGHT	1
MEDIUM/LIGHT *	VRC26123K	KIT, VALVE, DISCHARGE, 3.0" MEDIUM & 3.5" LIGHT SAHE CYLINDER	1
MEDIUM/HEAVY *	VRC26125K	KIT, VALVE, DISCHARGE, 3.0" HEAVY. & 3.5" MEDIUM SAHE CYLINDER	1
HEAVY	VRC26127K	KIT, VALVE, DISCHARGE, 3.5" SAHE CYLINDER HEAVY	1
4.0 and 4.5 STEEPLER CYLINDERS - SUCTION			
LIGHT	VRC26211K	KIT, VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26215K	KIT, VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26217K	KIT, VALVE, SUCTION, 4.0" & 4.5" SAHE CYLINDER HEAVY	1
4.0 and 4.5 STEEPLER CYLINDERS - DISCHARGE			
LIGHT	VRC26221K	KIT, VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER LIGHT	1
MEDIUM *	VRC26225K	KIT, VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER MEDIUM	1
HEAVY	VRC26227K	KIT, VALVE, DISCHARGE, 4.0" & 4.5" SAHE CYLINDER HEAVY	1
<p>* As a standard, Arrow provides valves with "Medium" springs. The springs can be light, medium light, medium, or heavy, depending on the operating conditions. Contact Arrow Engine Company if you need replacement parts.</p>			
<p>NOTE: Each valve repair kit contains the normal wear parts to repair one valve and consists of :</p> <ul style="list-style-type: none"> 1 - Plate, Valve 1 - Spring, Valve, set (complete set of 3-6 springs as required for the specific valve.) 1 - Nut, Lock 1 - Ring, Guide 1 - Pin, Locating 			
<p>NOTE: Part numbers are specific to each model valve depending on what size cylinder they are for.</p>			
<p>NOTE: Valve Repair Kits do not include valve seat gaskets.</p>			



5.5.3 Added Clearance Retainer Kits

5.5.3.1 About Added Clearance Retainer Kits

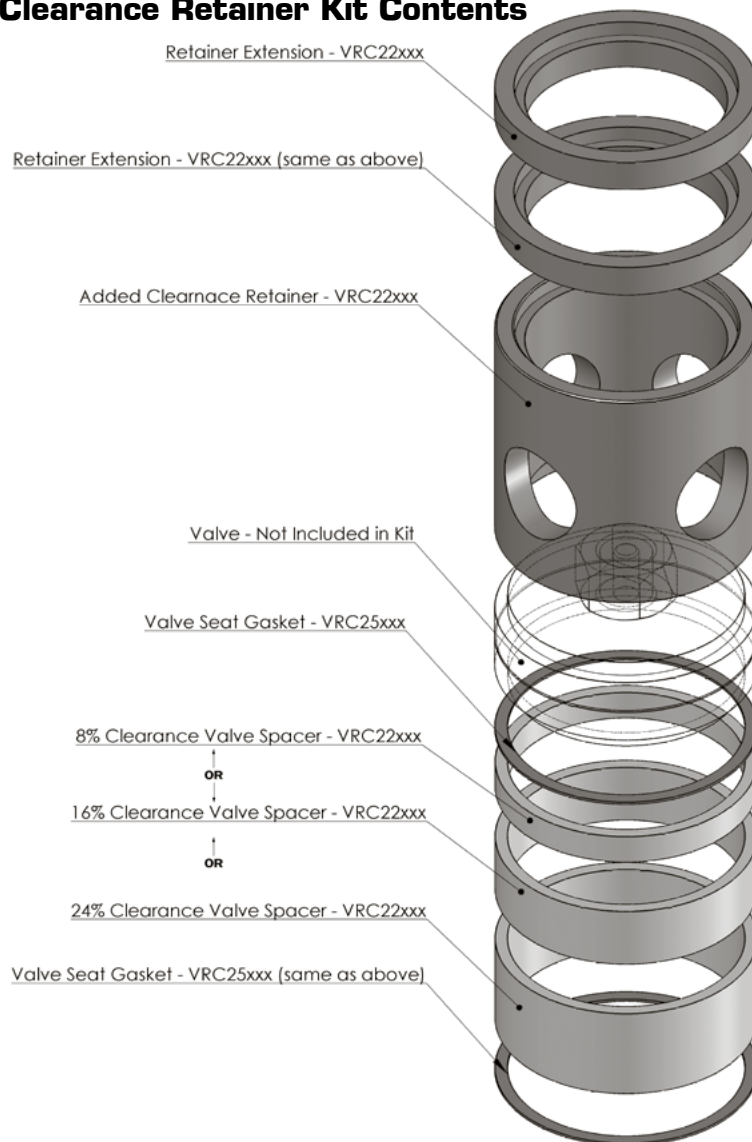
Clearance can be added to the Crank-End Steeple Cylinder using the Added Clearance Retainer Kits. Clearance can be added in 8 percent increments, by using the 8% valve spacer, or the 16% valve spacer or the 24% valve spacer. Install a valve seat gasket under the spacer and on top of the spacer (under 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*.

5.5.3.2 Added Clearance Retainer Kit Contents



ADDED CLEARANCE RETAINER KIT FOR SACE STEEPLE CYLINDERS

PART NUMBER	DESCRIPTION OF PART	QTY.
3.5 SACE CYLINDER - SUCTION VALVE		
VRC22356K	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	
VRC22356	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	
VRC29150	1 Instructions, Added Clearance Retainer Kit	
4.0 SACE CYLINDER - SUCTION VALVE		
VRC22406K	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	
VRC22406	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	
VRC29150	1 Instructions, Added Clearance Retainer Kit	
4.5 SACE CYLINDER - SUCTION VALVE		
VRC22456K	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	
VRC22456	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	
VRC29150	1 Instructions, Added Clearance Retainer Kit	
5.0 SACE CYLINDER - SUCTION VALVE		
VRC22506K	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	
VRC22506	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	
VRC29150	1 Instructions, Added Clearance Retainer Kit	

ADDED CLEARANCE RETAINER KIT FOR SACE STEEPLE CYLINDERS

PART NUMBER	DESCRIPTION OF PART	QTY.
5.5 SACE CYLINDER - SUCTION VALVE		
VRC22556K	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	
VRC22556	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	
VRC29150	1 Instructions, Added Clearance Retainer Kit	
6.0 SACE CYLINDER - SUCTION VALVE		
VRC22606K	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	
VRC22606	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	
VRC29150	1 Instructions, Added Clearance Retainer Kit	
6.5 SACE CYLINDER - SUCTION VALVE		
VRC22656K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 6.5" SACE CYLINDER	1
KIT INCLUDES:		
VRC22651	1 Spacer, Valve, 8% Clearance, 6.5" SACE Cylinder	
VRC22652	1 Spacer, Valve, 16% Clearance, 6.5" SACE Cylinder	
VRC22653	1 Spacer, Valve, 24% Clearance, 6.5" SACE Cylinder	
VRC22656	1 Retainer, Added Clearance, Suction Valve, 6.5" SACE Cylinder	
VRC22657	2 Retainer Extension, 6.5" SACE Cylinder	
VRC25655	2 Gasket, Suction Valve Seat, 6.5 - 8.0" Cylinder	
VRC29150	1 Instructions, Added Clearance Retainer Kit	
7.0 SACE CYLINDER - SUCTION VALVE		
VRC22706K	KIT, RETAINER, ADDED CLEARANCE, SUCTION VALVE, 7.0" SACE CYLINDER	1
KIT INCLUDES:		
VRC22701	1 Spacer, Valve, 8% Clearance, 7.0" SACE Cylinder	
VRC22702	1 Spacer, Valve, 16% Clearance, 7.0" SACE Cylinder	
VRC22703	1 Spacer, Valve, 24% Clearance, 7.0" SACE Cylinder	
VRC22706	1 Retainer, Added Clearance, Suction Valve, 7.0" SACE Cylinder	
VRC22707	2 Retainer Extension, 7.0" SACE Cylinder	
VRC25655	2 Gasket, Suction Valve Seat, 6.5 - 8.0" Cylinder	
VRC29150	1 Instructions, Added Clearance Retainer Kit	



LUBRICATION SYSTEM: DIVIDER BLOCKS AND TUBING AND DISTANCE PIECE VENTING

6.1 Divider Blocks

DIVIDER BLOCKS

PART NUMBER	DESCRIPTION	QTY
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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 SEC.	1
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SINGLE STAGE

VRC28602	BLOCK, DIVIDER, 1 (or 2) STG, 2.5-4.0 USE WITH 3/16" PUMP VRC28510 @ 3.6 PINTS/DAY CYCLE TIME 25 SEC.	1
VRC28603	BLOCK DIVIDER 1 STG, 4.5-6.0 USE WITH 1/4" PUMP VRC28512 @ 4.8 PINTS/DAY CYCLE TIME 25 SEC.	1
VRC28604	BLOCK DIVIDER 1 STG, 6.5-8.0 USE WITH 1/4" PUMP VRC28512 @ 6.0 PINTS/DAY CYCLE TIME 25 SEC.	1

TWO STAGE

VRC28602	BLOCK, DIVIDER, 2 (OR 1) STG 3.0-4.5 × 2.5-4.0 USE WITH 3/16" PUMP VRC28510 @ 3.6 PINTS/DAY CYCLE TIME 25 SEC.	1
VRC28600	BLOCK, DIVIDER, 2 STG, 4.5-6.5 × 2.5-5.0 USE WITH 1/4" PUMP VRC28512 @ 4.76 PINTS/DAY CYCLE TIME 22 SEC.	1
VRC28605	BLOCK, DIVIDER, 2 STG. 6.5-8.0 × 3.5-6.5 USE WITH 1/4" PUMP VRC28512 @ 5.85 PINTS/DAY CYCLE TIME 22 SEC.	1

THREE STAGE

VRC28606	BLOCK, DIVIDER, 3 STG 3.5-5.5 × 3.5-4.5/2.25-2.50HP WITH 1/4" PUMP VRC28512 @ 5.20 PINTS/DAY CYCLE TIME 37 SEC. *	1
VRC28608	BLOCK, DIVIDER, 3 STG 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 SEC.	1
VRC28609	BLOCK, DIVIDER, 3 STG 5.5-7.0 × 4.5-6.0/3.0-3.5 USE WITH 3/8" PUMP VRC28514 @ 6.8 PINTS/DAY CYCLE TIME 24 SEC.	1
VRC28601	BLOCK, DIVIDER, 3 STG 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 SEC.	1

* High pressure system is used when discharge pressure is > 1200psi & requires 5 balancing valves, part number VRC28615.

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6.1.1 Balancing Valves For Divider Blocks

DIVIDER BLOCK VALVES		
PART NUMBER	DESCRIPTION	QTY
VRC28615	VALVE, BALANCING, DIVIDER BLOCK *	1
<i>* High pressure system is used when discharge pressure is > 1200psi & requires 5 balancing valves, part number VRC28615.</i>		

LUBRICATION SYSTEM TUBING

NUMBER	PART NUMBER	DESCRIPTION OF PART	QTY.	
1	VRC28800A	TUBING & FITTINGS KIT COMPLETE	1	
1A	VRC28802	CLAMP, TUBING, 2 TUBE (W/SCREWS & NUTS)	2	
1B	VRC28803	CLAMP, TUBING, 3 TUBE (W/SCREWS & NUTS)	4	
1C	VRC28804	CLAMP, TUBING, 4 TUBE (W/SCREWS & NUTS)	2	
1D	VRC28805	CLAMP, TUBING, 5 TUBE (W/ SCREWS & NUTS)	2	
VRC28810A	2	VRC28810A	TUBING ASSEMBLY, STRAINER TO PUMP	1
	2A	VRC28871	FITTING, 1/2" 14 NPT × 3/4" TUBE 90	1
	2B	VRC28875-13	TUBING, 3/4" 304SS, 13.26" LONG	1
	2C	VRC28872	FITTING, 1/2" 14 NPT × 3/4" TUBE STR.	1
3	VRC28801A	FITTING, PUMP TO RV, 1/2" 14 NPTF × 3/4"- 16 SAE O-RING	1	
VRC28811A	4		TUBING ASSEMBLY, RV TO FILTER INLET	1
	4A	VRC28815	FITTING, 3/4" 16 SAE O-RING × 1/2" TUBE 90	1
	4B	VRC28850-12.5	TUBING, 1/2" 304SS, 12.46" LONG	1
	4C	VRC28851	FITTING, 1/2" 14 NPT × 1/2" TUBE STR.	1
VRC28812A	5	VRC28812A	TUBING ASSEMBLY, RV TO SUMP	1
	5A	VRC28815	FITTING, 3/4" 16 SAE O-RING × 1/2" TUBE 90	1
	5B	VRC28850-10.7	TUBING, 1/2" 304SS, 10.71" LONG	1
	5C	VRC28852	FITTING, 3/8" 18 NPT × 1/2" TUBE STR.	1
VR-C28813A	6	VRC28813A	TUBING ASSEMBLY, FILTER OUTLET TO 6 PORT MANIFOLD	1
	6A	VRC28853	FITTING, 1/2" 14 NPT × 1/2" TUBE 90	2
	6B	VRC28850-13.6	TUBING, 1/2" 304SS, 12.57" LONG	1
7	VRC28120	MANIFOLD, 6 PORT, CUSTOM	1	
VRC28830A	8	VRC28830A	TUBING ASSEMBLY, #1 PORT TO THROW 1 CROSSHEAD, TOP	1
	8A	VRC28821	FITTING, 1/4" 18 NPT × 1/4" TUBE STR.	1
	8B	VRC28825-63.0	TUBING, 1/4" 304SS, 63.04" LONG	1
	8C	VRC28822	FITTING, 1/8" 27 NPT × 1/4" TUBE 90	1
	8D	VRC28835	FITTING, ORIFICE, .031	1
VRC28831A	9	VRC28831A	TUBING ASSEMBLY, #2 PORT TO THROW 2 CROSSHEAD TOP	1
	9A	VRC28821	FITTING, 1/4" 18 NPT × 1/4" TUBE STR.	1
	9B	VRC28825-24.5	TUBING, 1/4" 304SS, 24.52" LONG	1
	9C	VRC28822	FITTING, 1/8" 27 NPT × 1/4" TUBE 90	1
	9D	VRC28835	FITTING, ORIFICE, .031	1

LUBRICATION SYSTEM TUBING

NUMBER	PART NUMBER	DESCRIPTION OF PART	QTY.
VRC28832A	10	VRC28832A TUBING ASSEMBLY, #3 PORT TO CYLINDER LUBE PUMP	1
	10B	VRC28890 FITTING, CHECK VALVE, 1/8" M × 1/4" TUBE STR.	1
	10C	VRC28825-33.6 TUBING, 1/4" 304SS, 33.61" LONG	1
	10D	VRC28823 FITTING, 1/8" 27 NPT × 1/4" TUBE STR.	1
VRC28833A	11	VRC28833A TUBING ASSEMBLY, #4 PORT TO THROW 2 CROSSHEAD BOTTOM	1
	11A	VRC28821 FITTING, 1/4" 18 NPT × 1/4" TUBE STR.	1
	11B	VRC28825-9.2 TUBING, 1/4" 304SS, 9.18" LONG	1
	11C	VRC28823 FITTING, 1/8" 27 NPT × 1/4" TUBE STR.	1
	11D	VRC28836 FITTING, 3/8" 18 NPT × 1/8" 27 NPT W/ORIFICE, .031	1
	11E	VRC28837 HOSE, FLEX ASSEMBLY, FRAME TO CROSSHEAD	1
	11F	VRC28838 FITTING, 7/16" 20 NPT × 1/4" TUBE 90	1
VRC28834A	12	VRC28834A TUBING ASSEMBLY, #5 PORT TO THROW 1 CROSSHEAD BOTTOM	1
	12A	VRC28821 FITTING, 1/4" 18 NPT × 1/4" TUBE STR.	1
	12B	VRC28825-24.7 TUBING, 1/4" 304SS, 24.71" LONG	1
	12C	VRC28823 FITTING, 1/8" 27 NPT × 1/4" TUBE STR.	1
	12D	VRC28836 FITTING, 3/8" 18 NPT × 1/8" 27 NPT W/ORIFICE .031	1
	12E	VRC28837 HOSE, FLEX ASSEMBLY, FRAME TO CROSSHEAD	1
	12F	VRC28838 FITTING, 7/16" 20 NPT × 1/4" TUBE 90	1
	13	VRC285XX Pump, Oil, Cylinder Lube (see Section 2.5 for pumps available and Section 6.1 for size required)	1
	14	VRC28847 FITTING, REDUCER, MANIFOLD 1/8" 27 NPTM × 1/4" 18 NPTM 90	1
	15	VRC28640 MANIFOLD, LUBE PUMP, CUSTOM	1
VRC28840A	16	VRC28840A TUBING ASSEMBLY, LUBE PUMP MANIFOLD TO IN-LINE FILTER	1
	16A	VRC28826 FITTING, 1/4" 18 NPT × 1/4" TUBE 90	1
	16B	VRC28825-17.4 TUBING, 1/4" 304SS, 17.44" LONG	1
	16C	VRC28821 FITTING, 1/4" 18 NPT × 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. They must be ordered separately.

LUBRICATION SYSTEM TUBING

NUMBER	PART NUMBER	DESCRIPTION OF PART	QTY.	
VRC28841A	18	VRC28841A	TUBING ASSEMBLY, IN-LINE FILTER TO NO-FLOW SWITCH	1
	18A	VRC28821	FITTING, 1/4" 18 NPT × 1/4" TUBE STR.	1
	18B	VRC28825-8.8	TUBING, 1/4" 304SS, 8.76" LONG	1
	18C	VRC28823	FITTING, 1/8" NPT × 1/4" TUBE STR.	1
19	VRC28720*	SWITCH, NO-FLOW SAFETY	1	
VRC28842A	20	VRC28842A	TUBING ASSEMBLY, NO-FLOW SWITCH TO DIVIDER BLOCK	1
	20A	VRC28823	FITTING, 1/8" 27 NPT × 1/4" TUBE STR.	1
	20B	VRC28825-15.3	TUBING, 1/4" 304SS, 15.31" LONG	1
	20C	VRC28826	FITTING, 1/4" NPT × 1/4" TUBE 90	1
VRC28860A	21	VRC28860A	TUBING ASSEMBLY, DIVIDER BLOCK TO THROW 2 CYLINDER	1
	21A	VRC28823	FITTING, 1/8" NPT × 1/4" TUBE STR.	2
	21B	VRC28825-35.4	TUBING, 1/4" 304SS, 35.37" LONG	1
	21C	VRC28827	FITTING, UNION 1/4" × 1/4" TUBE STR.	1
	21D	VRC28825-9.8	TUBING, 1/4" 304SS, 9.77" LONG	1
	21E	VRC28730*	VALVE, CHECK, LUBE OIL, 1/8" NPT	1
	21F	VRC28866	FITTING, 1/8" NPTF × 1/4" NPTM 90	1
VRC28861A	22	VRC28861A	TUBING ASSEMBLY, DIVIDER BLOCK TO THROW 1 CYLINDER	1
	22A	VRC28823	FITTING, 1/8" NPT × 1/4" TUBE STR.	2
	22B	VRC28825-33.9	TUBING, 1/4" 304SS, 33.86" LONG	1
	22C	VRC28827	FITTING, UNION 1/4" × 1/4" TUBE STR.	1
	22D	VRC28825-8.9	TUBING, 1/4" 304SS, 8.88" LONG	1
	22E	VRC28730*	VALVE, CHECK, LUBE OIL, 1/8" NPT	1
	22F	VRC28866	FITTING, 1/8" NPTF × 1/4" NPTM 90	1
VRC28862A	23	VRC28862A	TUBING ASSEMBLY, DIVIDER BLOCK TO PACKING LUBE, THROW 2	1
	23A	VRC28823	FITTING, 1/8" NPT × 1/4" TUBE STR.	2
	23B	VRC28825-26.4	TUBING, 1/4" 304SS, 26.43" LONG	1
	23C	VRC28730*	VALVE, CHECK, LUBE OIL, 1/8" NPT	1
	23D	VRC28867	FITTING, 1/8" NPTF × 1/8" NPTM 90	1
	23E	VRC28876	FITTING, PACKING, CUSTOM 1/2" 14 NPT × 7/16-20	1
	23F	VRC28877	HOSE, FLEX ASSEMBLY, PACKING LUBE	1
	23G	VRC28878	FITTING, HOSE TO PACKING, 1/8" M × 1/8" F 90	1

* Part is NOT included in the "Tubing and Fittings Complete" kit. They must be ordered separately.

LUBRICATION SYSTEM TUBING

NUMBER	PART NUMBER	DESCRIPTION OF PART	QTY.	
VRC28863A	24	VRC28863A	TUBING ASSEMBLY, DIVIDER BLOCK TO PACKING LUBE THROW 1	1
	24A	VRC28823	FITTING, 1/8" NPT × 1/4" TUBE STR.	2
	24B	VRC28825-26.3	TUBING, 1/4" 304SS, 26.32" LONG	1
	24C	VRC28730*	VALVE, CHECK, LUBE OIL, 1/8" NPT *	1
	24D	VRC28867	FITTING, 1/8" NPTF × 1/8" NPTM 90	1
	24E	VRC28876	FITTING, PACKING, CUSTOM 1/2" 14 NPT × 7/16-20	1
	24F	VRC28877	HOSE, FLEX ASSEMBLY, PACKING LUBE	1
	24G	VRC28878	FITTING, HOSE TO PACKING, 1/8" M × 1/8" F 90	
VRC28870A	25	VRC28870A	TUBING ASSEMBLY, PACKING VENT, THROW 1 & 2	2
	25A	VRC28876	FITTING, PACKING, CUSTOM 1/2" 14 NPT × 7/16-20	2
	25B	VRC28887	HOSE, FLEX ASSEMBLY, PACKING VENT	2
	25C	VRC28878	FITTING, HOSE TO PACKING, 1/8" M × 1/8" F 90	2
	26	VRC28880A	ASSEMBLY, DISTANCE PIECE VENT, THROW 1 & 2	2
	26A	VRC28839	FITTING, REDUCER BUSHING, 1/4" 18 M × 1/8" 27 F (Not Shown)	2
	26B	VRC28888	CAP, VENT (Not Shown)	2
	27	VRC28610*	INDICATOR, OVERPRESSURE, LUBE OIL	1
	27A	VRC28611*	DISC, RUPTURE, OVERPRESSURE (2350 psi) (may be ordered separately)	1
28	VRC28630*	PORT, PURGE, 1/8" NPT	1	
* Part is NOT included in the "Tubing and Fittings Complete" kit. They must be ordered separately.				

6.3 Lubrication System Repair Kits

6.3.1 Cylinder Lubrication System Repair Kit

LUBRICATION SYSTEM REPAIR KIT		
PART NUMBER	DESCRIPTION OF PART	QTY.
VRC28700K	CYLINDER LUBRICATION SYSTEM REPAIR KIT	1
<p>Kit Contains: 4 - Disc. Rupture, Overpressure 1 - Element, Filter, 10 Micron 1 - VALVE, CHECK, LUBE OIL, 1/8" NPT 1 - Sightglass & Seals for Lube Pump Reservoir (includes: Sightglass; (2) Gaskets & (4) Screws)</p>		

This kit is for the reservoir with tube sight glass.

6.3.2 Tubing and Fittings Kit

TUBING AND FITTING COMPLETE KIT		
PART NUMBER	DESCRIPTION OF PART	QTY.
VRC28800K	KIT, TUBING & FITTING COMPLETE	1
<p><i>Kit Contains all parts listed in the Lubrication System Tubing & Fittings Section 6.2 with the exception of the parts show with an (*) . These parts designated with (*) are not included in the kit and must be ordered separately.</i></p>		



Compressor Parts

Standard Limited Warranty

Delivered and sold after January 1, 2008

Special Notes:

All prices, sales conditions, and discounts in catalog and/or on discount schedule are subject to change without notice. Any use of, or reference to, any original manufacturer's name, brand, or part number in Arrow catalog does not warrant nor imply that any Arrow parts or products are manufactured or guaranteed by anyone other than Arrow Engine Company. Warranty covering any defective or failing material covers only the material in question and specifically does not include wear parts and labor necessary to replace same.

Limited Warranty on Replacement Parts:

1. Arrow applies a Standard Parts Only Warranty of one (1) year to all purchased replacement parts. Labor expenses are eligible for reimbursement.
2. Removal and reinstallation expenses are not covered on service parts.
3. Because parts and major assemblies are not serial numbered, Arrow depends upon its Distributors to carefully screen all claims relating to such items and to be certain, before filing claims, that the material claimed defective was opened only within qualifying time limitations.
4. When manufacturers of trade accessories do not have an established dealer organization authorized to consider warranty claims, Arrow will accept the return of such accessories and will process claims with the manufacturers, provided replacement parts are purchased from Arrow. In filing such claims, it becomes necessary that all pertinent information be given, such as length of service, probable cause of failure, model and serial number of compressor from which accessory was removed, operating conditions, etc., so that we can give the accessory manufacturer complete information regarding the failure. Adjustments will be governed by the accessory manufacturer's reimbursement.
5. If a replacement part or assembly is found to be defective in manufacture of material prior to or at the time of installation, Arrow may, depending upon circumstances involved, elect to have the Distributor repair the part, rather than replace it in its entirety. In such cases, Arrow may elect to make an exception to its warranty policy which declines responsibility for payment of warranty labor on parts. The prime consideration will be whether repair of or replacing, the part is more economical. The Customer Service and Quality Departments should be consulted for a determination prior to the accomplishment of any major repairs.

Warranty Coverage:

ARROW'S LIABILITY FOR ANY DAMAGES DUE OWNER SHALL BE LIMITED TO THE PURCHASE PRICE OF THE GOODS. This paragraph states purchaser's sole and exclusive remedy against Arrow for warranty. Arrow shall not be liable for any loss, damage, or injury resulting from delay in delivery or installation of the goods or for any failure to perform which is due to circumstances beyond its control. Arrow's maximum liability for damages, including, without limitation, contract damages and damages for injuries to persons or property, with respect to the goods or any services in connection with the goods, IS LIMITED TO AN AMOUNT NOT TO EXCEED THE PURCHASE PRICE OF THE GOODS. In no event shall Arrow be liable to purchaser for any incidental, consequential or special damages. The statute of limitations applicable to all claims arising under this agreement or otherwise shall be one (1) year from the date the claim accrues.

Warranty Limitations:

Arrow will pay for parts and labor needed to repair compressor damage directly resulting from an above defined warranty failure which occurs within the warranty period stated. All warranty claims must be authorized, documented and submitted within 30 days of the failure date while under the warranty period. Costs will be limited to those required to restore the compressor to the functional condition existing immediately prior to the failure and will be calculated based on the prices paid for the Arrow parts installed during the original compressor build. Only straight time labor rates will be reimbursed based on a reasonable prevailing rate, not to exceed the published flat rate, for the geographic area in which the repairs are performed. Additional labor charges for overtime or holidays will not be allowed. Additionally, Arrow will pay the cost of maintenance items when these items are not reusable as a result of a warrantable failure.

Products Not Manufactured by Arrow:

With respect to products not manufactured by Arrow, Arrow makes no representations or warranties of whatsoever nature, directly or indirectly, expressed or implied including but not limited to any representations or warranties with respect to suitability, durability, fitness for a particular purpose or merchantability, except to the extent that Arrow can enforce warranties provided by the manufacturers of such parts.

Prices:

All quotations are subject to change without notice, and the price in effect at the time of the order will apply.

Seller's Right to Manufacture:

Seller, in its sole discretion, shall have the right to manufacture the products provided hereunder as far in advance of its estimated shipping schedule as it deems appropriate. Seller expressly reserves the right to change or modify the design and construction of any products in due course of Seller's manufacturing procedure, without incurring any obligation or liability to furnish or install such changes, modifications or improvements on products previously or subsequently sold.

Limitation on Liability:

SELLER'S TOTAL RESPONSIBILITY FOR ANY CLAIMS, DAMAGES, LOSSES OR LIABILITIES ARISING OUT OF, OR RELATED TO, ITS PERFORMANCE OF THIS CONTRACT OR THE PRODUCTS COVERED HEREUNDER SHALL NOT EXCEED THE PURCHASE PRICE OF THE REPLACEMENT PART. In no event shall Seller be liable for any special, indirect, incidental or consequential damages of any character; but not limited to, loss of use of productive facilities of equipment, loss of profits, property damage, expenses incurred in reliance on Seller's performance hereunder, or lost production, whether suffered by Buyer or any third party. Seller disclaims all liability for any and all costs, claims, demands, charges, expenses or other damages, either direct or indirect, incident to all property damages arising out of any cause of action based on strict liability including actions under Section 402A of the Restatement of Torts Second.

Modification, Rescission & Waiver:

This contract may not be modified or rescinded nor any of its provisions waived unless such modification, rescission or waiver is in writing and signed by an officer of Seller at its offices in Tulsa, Oklahoma.

Miscellaneous:

Seller reserves the right to furnish commercially equivalent or better substitutes for materials. Seller may during any periods of shortage due to causes beyond the control of Seller or its suppliers, prorate its supply of products among all of its Buyers in such manner as may be deemed equitable in the sole judgment of Seller. Seller shall not incur any liability to Buyer because of any proration hereunder. All orders must be accepted by an authorized employee of Seller. Failure of Seller in any one or more instances, upon the performance of any of the terms and conditions of this contract or the failure of Seller to exercise any of its rights hereunder shall not be construed as a waiver or relinquishment of any such term, condition or right hereunder and shall not affect Seller's right to insist upon strict performance and compliance with regard to any unexecuted portions of this contract or future performance of these terms and conditions.

Technical Advice:

Seller shall not be responsible for the results of any Technical Advice or Services rendered by any employee of Seller in connection with the design, installation, use or repair of the products sold hereunder.

ARROW MANUFACTURED
**REPLACEMENT
PARTS**

Caterpillar® Engines

G379	G3304
G398	G3306
	G399

Waukesha® Engines

F2895	P9390
F3521	145G/F817
F5108	140G/F554
L5790	WAK/1197
	L7042

Fairbanks Morse® Engines

ZC-118	ZC-503
ZC-208	ZC-739
	ZC-346

Ajax® Engines

5 x 6½
EA-22, 6½ x 8 CMA
EA-30, 7¼ x 8 CMA
E-30, 7½ x 10 CMA
E-42, 8½ x 10 CMA
DP-60, 9½ x 10 CMA
DP-70/80/160, 11 x 14 CMA
DP-115/230, 13¼ x 16

Piston & Rod Assemblies
180
360
600
800

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OEM

C-Series

*C-46	*C-96
*C-66	*C-101
*C-106	*C-255

VR-Series

VR-155	VR-310
VR-220	*VR-330
VR-232	*VR-330CF
*VR-260	VR-265
VR-283	*VR-380

A-Series

*A42	*A54	*A62
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K6 Slow Speed Engine

*

Lufkin Engines

L-333	L-1770
*L-795	L-2165

Witte Engines

98	E15	F32
B12	E20	F42

Arrow Chemical Pumps

- * 10 Series (beam operated)
- * 12 & 13 Series (pneumatic)
- * 430 Series (electric)
- * 500 & 510 Series (pneumatic)
- * Solar Chempump

Gas Compressors

* *VRC-2 *VRC-CNG

Gas Products

- * Volume Tanks
- * Vertical & Horizontal Separators
- * Suction Scrubbers
- * Meter Runs
- * Coalescers
- * Skids



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