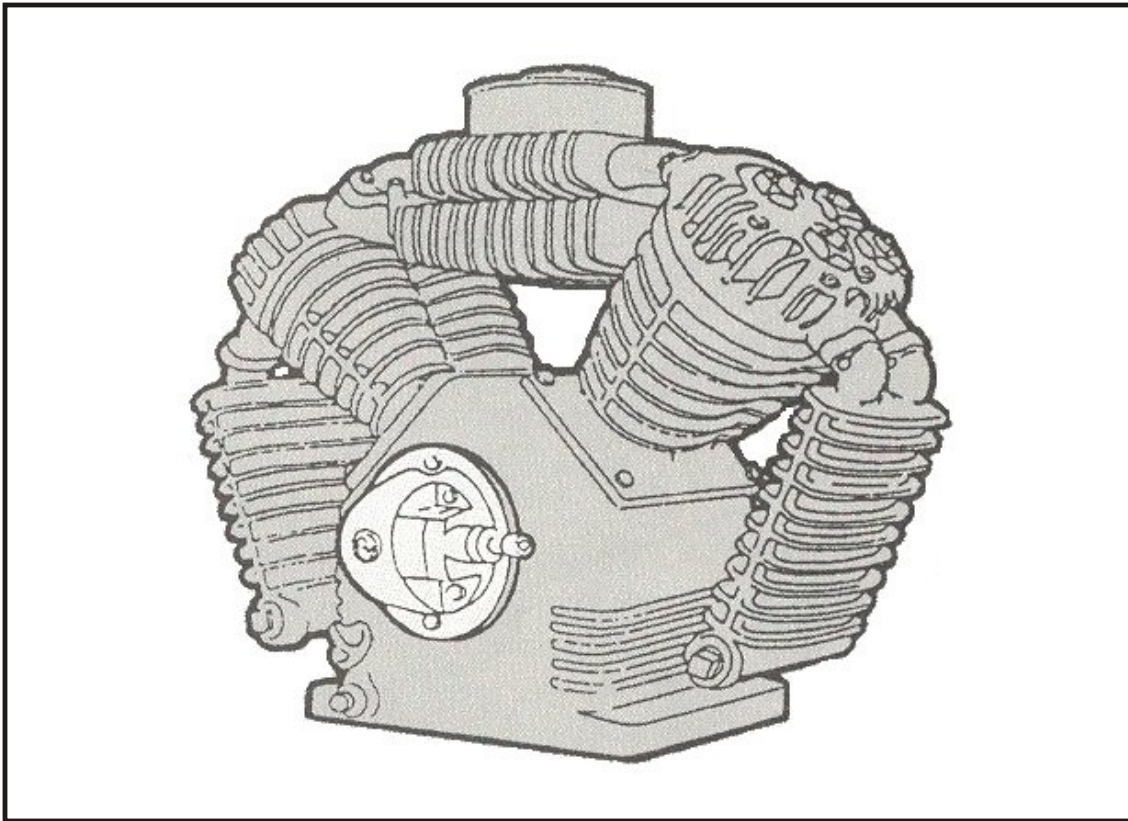


445 Series Compressor Pump

Note: This Pump is obsolete. Please contact your local DV Systems Distributor for Parts and/or a newer replacement Pump.



Warning: Check for proper oil level before using this equipment.

Use 'PR20' 20 weight non-detergent oil for ambient temperatures between 40° and 90°F.

Use 'PR30' 30 weight non-detergent oil for ambient temperatures above 90°F.

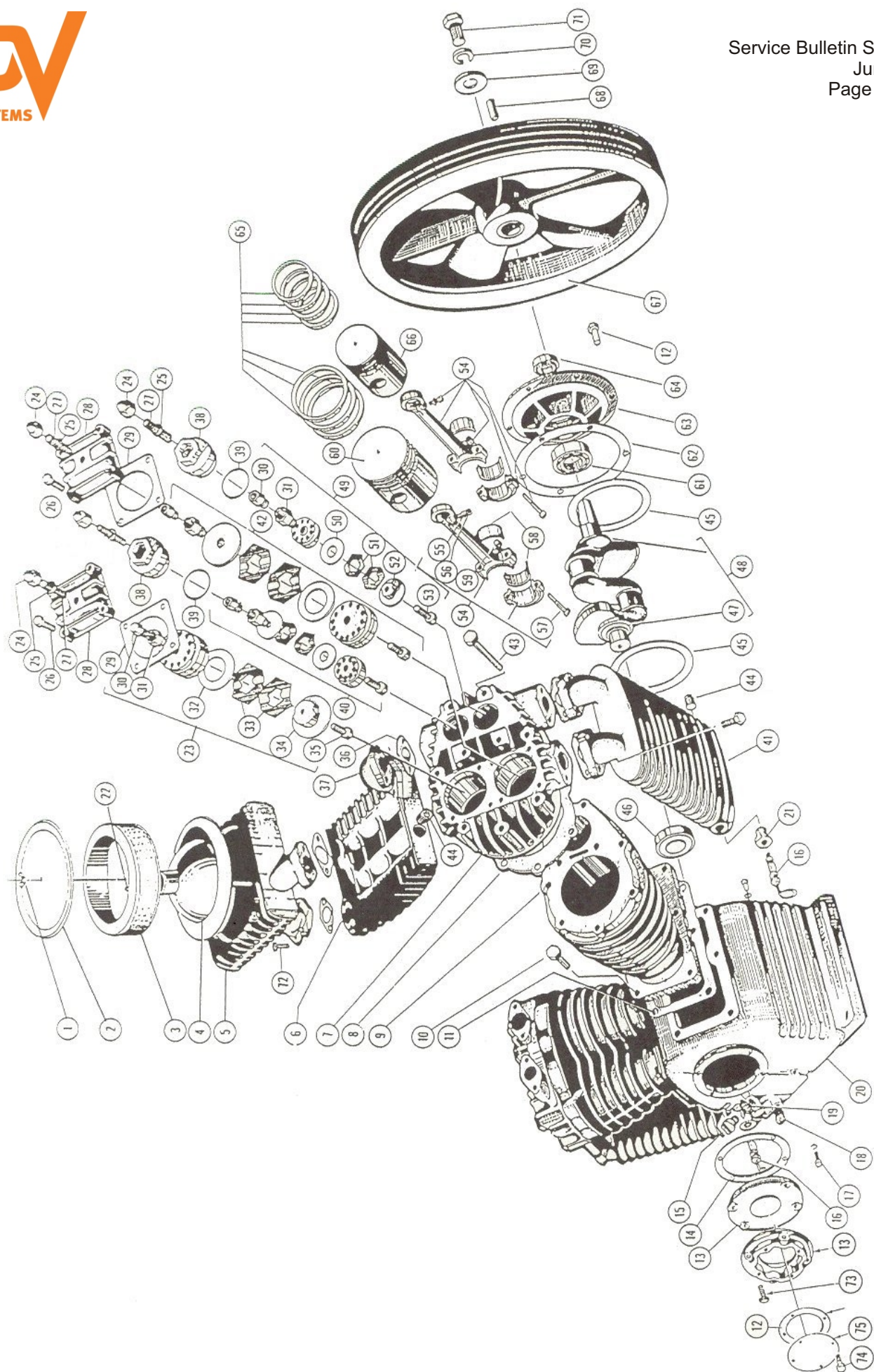
Specifications:

Crankcase Capacity (Approx):	112 Fluid Oz (2.8 litres)
Minimum RPM:	300
Maximum RPM:	1000
Max. Continuous Working Press.:	150 psi

If you require assistance, contact your local DV Systems Distributor or Authorized Service Centre. If you wish to contact DV Systems directly or need to locate your closest Distributor, please reach us at:

Phone: (705) 728-5657
Fax: (800) 561-1663

Website: www.dvsystems.ca
Email: sales@dvsystems.ca





Item Numbers in the Chart(s) below refer to the Pump Breakdown on Page 2.

Item:	Part Number	Qty	Description
1	SS-2037	1	1/4" Wing Nut (NLA)
2	445-336	1	Air Filter Cover (NLA)
3	43631-010	1	Air Filter
4	445-463	1	Baffle (NLA)
5	445-337	1	Intake Manifold (NLA)
6	445-329	1	Exhaust Manifold (NLA)
7	445-24	2	Cylinder Head (NLA)
8	445-26	2	Head Gasket
9	445-325	2	Cylinder (NLA)
10	SS-48	12	1/2-13 x 1" HHCS
11	445-327	2	Cylinder - Crankcase Gasket
12	445-144	1	Gasket
13	445-136	1	Bearing Housing
14	445-12	1	End Plate Gasket
15	NCB-303-1	1	Oil Filler Plug
16	TIA-5075	2	75 psi Safety Valve
17	225-6	2	Screw
18	SS-1230	1	Pipe Plug 1/2"
19	SS-2670	1	'O' Ring
20	445-4	1	Crankcase
21	SS-1249	2	Shoulder Bushing 3/4" x 1/4"
22	445-333-1	1	Air Filter Stud (NLA)
23	445-417-1	2	Low Pressure Intake Valve
24	SS-7424	8	Cap Nut 3/8-16 x 5/8"
25	SS-01767	8	Gasket (NLA) Use 'SS-7424'
26	SS-14	16	5/16 - 18 x 1 HHCS
27	SS-6045	8	Set Screw 3/8-16 x 1-1/2
28	445-88	4	Valve Cap (NLA)
29	445-128	4	Gasket
30	445-361A	8	Cap Nut
31	445-360A	8	Jam Nut
32	235-25	4	Low Pressure Valve Disc
33	445-36	8	Low pressure Valve Spring
34	445-29-1	4	Low pressure Valve Guide
35	SS-10135	4	Cap Screw 5/16-24 x 1
36	445-196	10	Gasket
37	445-328	2	Elbow (NLA)
38	445-89	4	High Pressure Valve Plug (NLA)

Item:	Part Number	Qty	Description
39	225-28	4	High Pressure Valve Gasket
40	445-4205	2	High Pressure Exhaust Valve
41	447-330	2	Intercooler (See Note A)
42	445-405-1	2	Low Pressure Exhaust Valve
43	SS-56	18	1/2-13 x 3" HHCS (NLA)
44	SS-3226	3	Cntrsunk Pipe Plug 3/4" (NLA)
45	445-5-1	2	Oil Throw Ring
46	445-23	1	Ball Bearing
47	445-43	1	Oil Cup
48	445-450	1	Crankshaft & Oil Cup Assy
49	445-4217	2	High Pressure Intake Valve
50	225-25-1	4	High Pressure Valve Disc
51	447-236	8	High Pressure Valve Spring
52	445-94	4	High Pressure Valve Guide
53	SS-10135	4	Cap Screw 5/16-24 x 1"
54	445-4110-2	4	Rod & Cap Assy
55	SS-3674	4	Lockwasher (NLA)
56	21416-037	4	Cap Screw (NLA)
57	235-41	8	Bolt (NLA)
58	445-474	4	Connecting Rod Insert (Std)
59	SS-7982	8	Lock Nut 3/8-24
60	445-412-1	2	LP Piston & Pin (Std)
61	SST-3001	1	Ball Bearing
62	445-13	1	End Plate Gasket
63	445-9	1	End Plate
64	445-111	1	Oil Seal
65	KK-9805	2	Ring Kit (Std)
66	445-4112-1	2	HP Piston & Pin (Std)
67	445-2-1	1	Flywheel 20" 2B
68	SS-10493	1	Square Key 1/2" x 2-1/2"
69	445-326	1	Retaining Washer
70	SS-1509	1	Lockwasher Medium 3/4"
71	SS-6896	1	3/4-16 x 1-3/4" HHCS
72	SS-26	4	3/8-16 x 1-1/4" HHCS
73	SS-25	30	3/8-16 x 1" HHCS
74	SS-9	4	1/4-20 x 5/8" HHCS (NLA)
75	445-9700	1	End Plate (NLA)

Not Noted above but available are:

	445-9402	2	LP Rod & Piston Assembly
	445-9403	2	HP Rod & Piston Assembly

Note A: The Existing Cast Intercooler is no longer available. Order (1) '447-330' Intercooler, (2) '445-196' Gaskets, and (1) 'KK-9850' Bracket Assembly.

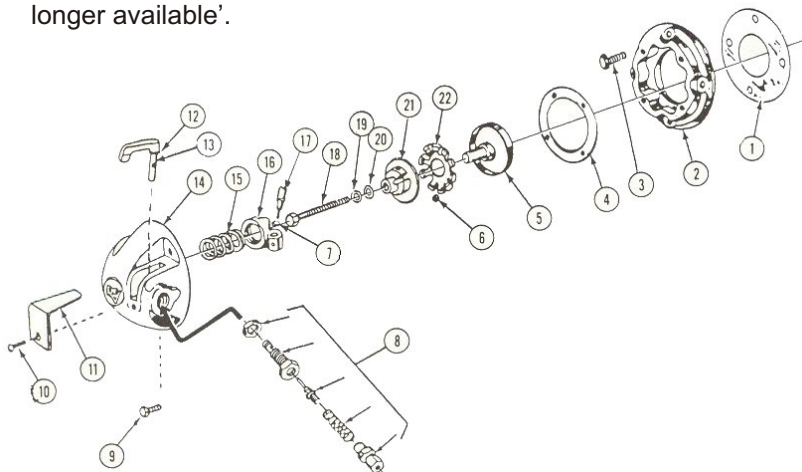
Kits Available for the '445' Pump

Part Number	Qty	Description	Includes
45875-011	1	Complete Gasket Kit	# 8, 11, 12, 14, 19, 25, 29, 36, 39, 62
VRK-643	2	Valve Repair Kit	# 25, 29, 30, 31, 32, 33, 35, 39, 50, 51
OK-445	1	Overhaul Kit	# 58, 64, 65 and (1) '45875-011', (2) 'VRK-643'
MK-445	1	Maintenance Kit	20 Weight Oil + Filter (for 1 change)

Centrifugal Pressure Release Assembly

Old Style 'CPR' Assembly.

Please note that items marked 'NLA' are 'no longer available'.



Item:	Part Number	Qty	Description
20	330-182	1	Snap Ring
21	330-419-1	1	Ball Cam Assy (NLA)
22	330-139-1	1	Ball Cage (NLA)

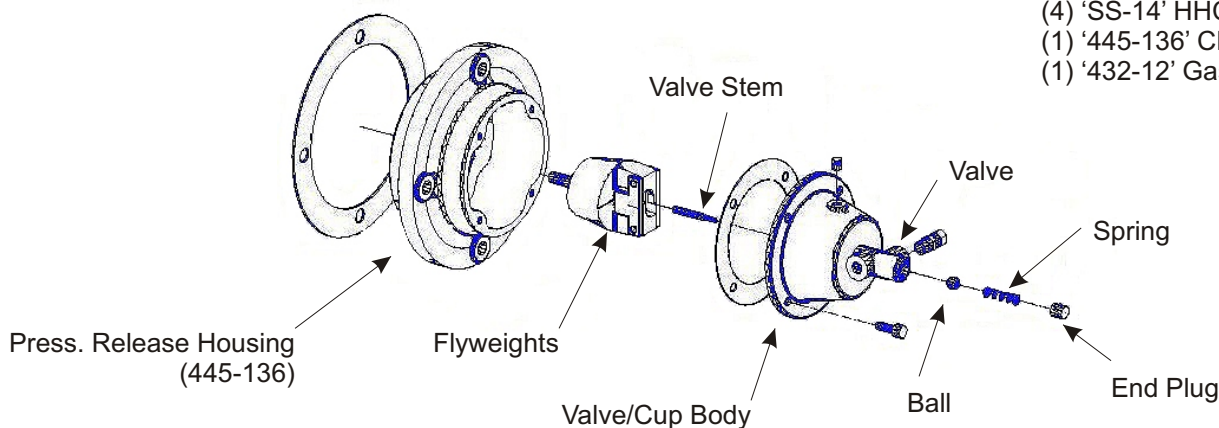
Item:	Part Number	Qty	Description
1	445-12	1	End Plate Gasket
2	445-136	1	Press. Release Housing
3	SS-25	4	3/8-16 x 7/8" HHCS
4	445-144	1	End Plate Gasket
5	445-433	1	Ball Cup Assy (NLA)
6	SS-1555	10	Hard Steel Ball 5/16" Dia
7	SS-3672	1	Lock Washer 3/16"
8	330-430-3	1	Valve Assy
9	SS-9	4	1/4-20 x 5/8" HHCS
10	SS-902	1	8-32 x 3/8 RHMS
11	445-189	1	Cover Plate
12	SS-2666	1	'O' Ring Buna-N
13	330-185	1	Valve lever
14	445-137	1	End Plate (NLA)
15	330-188	1	Return Spring
16	330-183	1	Cam
17	330-184	1	Screw (NLA)
18	SS-6914	1	5/16-18 x 2-3/4" HHCS
19	SS-1503	1	Lock Washer Med 5/16"

Note: This Kit can only be used on Pumps that operate at 500 rpm or more.

New Style 'CPR' Assembly.

This CPR can be retro-fitted onto an existing '445' Series Pump. Order:

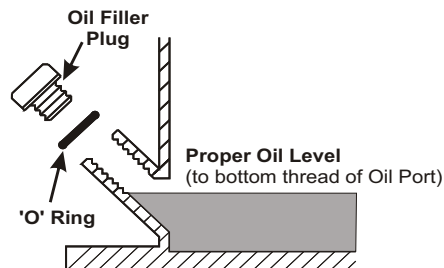
- (1) 'CPR-9700' Kit
- (4) 'SS-14' HHCS
- (1) '445-136' CPR Housing
- (1) '432-12' Gasket



Lubrication:

Fill the Crankcase to the lowest thread at the Oil Fill Port Opening. **Do not under or overfill.** See drawing.

Tightly screw in Oil Fill Plug using a crescent wrench. Use only **DV Systems Premium Compressor Oil** for the Air Compressor, as it has been specially formulated for your Unit, and contains only two additives, a rust inhibitor and an anti foaming agent.



Section Through CrankCase at Oil Fill Port

Compressor Torque Values

Item:	Description	In Lbs	Ft Lbs	Nm
11	Cylinder - Crankcase Gasket	564	47	63.7
13	Bearing Housing	240	20	27.1
14	CPR End Plate (CPR Assy)	72	6	8.1
17	Oil Ring Retainer	144	12	16.2
23	LP Intake Valve	180	15	20.3
26	LP Valve Cap	180	15	20.3
27	Valve Set Screw	180	15	20.3
30	Cap Nut	180	15	20.3
38	HP Valve Plug	-	125	169
40	HP Exhaust Valve Assy	180	15	20.3
42	LP Exhaust Valve Assy	180	15	20.3
43	Head Bolts	180	15	20.3
49	HP Intake Valve Assy	180	15	20.3
56	Connecting Rod - Pin End	275	23	31.1
57	Connecting Rod Bolts	408	34	46
63	End Plate	240	20	27.1
71	Flywheel Bolt	-	155	210

CAUTION. Pre-lubricate all Crank Throws and Insert Bearing surfaces to prevent Compressor tie-ups during the first few minutes of operation. Pour oil on the outside of the Connecting Rod and Crank shoulders. Use the Crankcase oil, DO NOT USE GREASE.

Honing Specifications

	Std. Cylinder Hone Diameter	Piston Skirt/ Cyl Dia Clear.
Low Pressure Cylinder	4.5000	.0065
	4.5005	.0085
High Pressure Cylinder	2.5000	.0025
	2.5005	.0045

1. Diametral Clearance of oversized Cylinders and Pistons is the same as standard Cylinders and Pistons.
2. Cylinders must be within diametral tolerance at all points, out of round or taper must not exceed .0005.
3. Hone 20 min to 35 max micro inches of surface roughness.
4. De-burr the sharp corners at the top of the Cylinder opening with a 1/64 to 1/32 x 30° chamfer.

Connecting Rod Insert Bearings

Insert	Crank Throw Diameter	Part Number
Standard	2.2490	445-474
	2.2485	
.010	2.2390	445-474-010 (NLA)
	2.2385	
.020	2.2290	445-474-020
	2.2285	

'445' Pump Specifications

Pump Model	HP	175 psi		125 psi		# of Cyl.	Bore	Stroke	Flywheel		Pump Dimensions (Refer to drawing)						Weight (Pounds) (Approx)
		RPM	Del'y (CFM)	RPM	Del'y (CFM)				Dia.	Groove	A	B	C	D	E	F	
445	7½	445	26.8	510	30.1	4	4.5" & 2.5"	4"	20"	2B	27.5"	23.625"	23.125"	20.625"	13"	10"	545
	10	590	34.1	675	39.4												
	15	880	48.5	880	49.2												

Note: Though the dimensions are correct, the Pump may not be exactly as shown.

