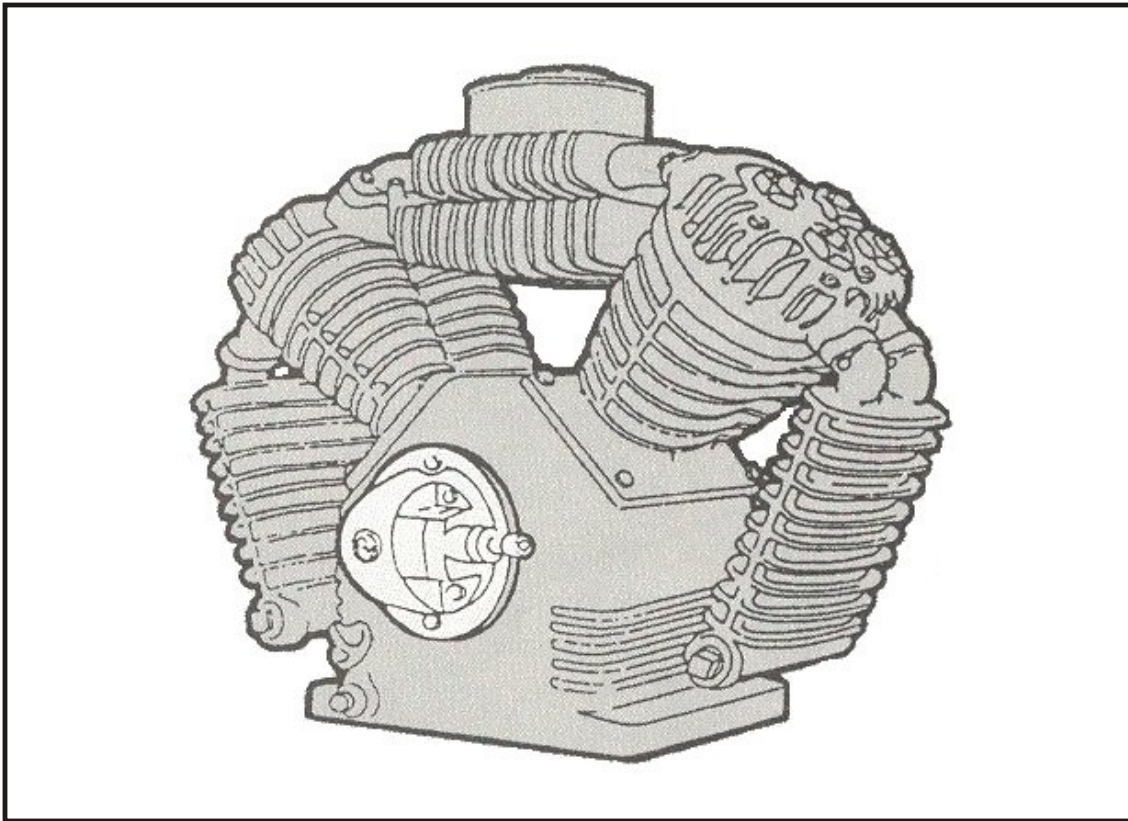


432 Series Compressor Pump

Note: This Pump is obsolete.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.

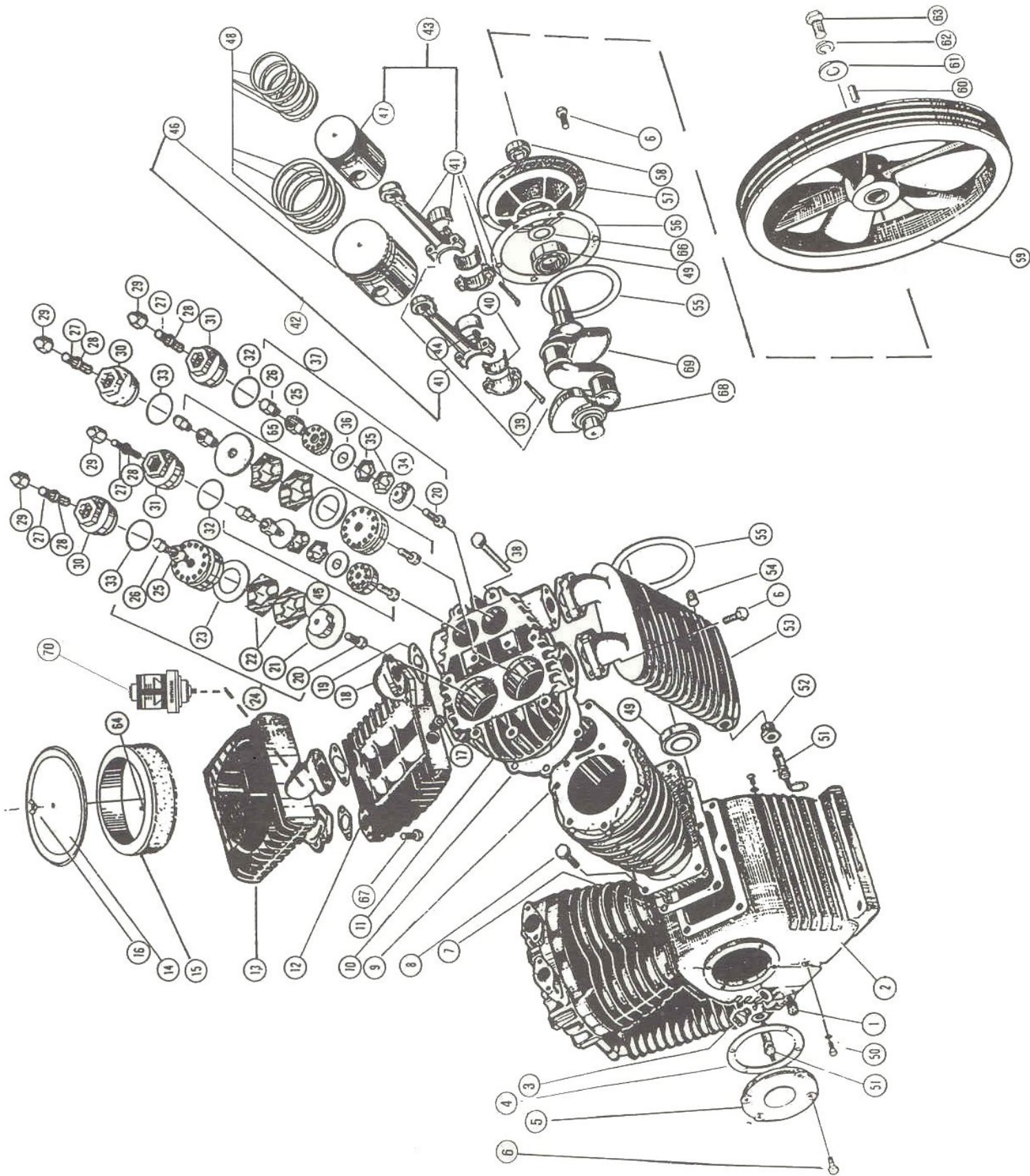
Specifications:

Crankcase Capacity (Approx):	86 Fluid Oz (2.15 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





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

Item:	Part Number	Qty	Description
1	SS-1230	1	Pipe Plug Black 1/2"
2	432-4	1	Crankcase
3	NCB-303-1	1	Oil Filler Plug
4	432-12	1	End Plate Gasket
5	432-10	1	End Plate (NLA)
6	SS-14	26	5/16-18 x 1" HHCS
7	432-327	2	Cylinder to Crankcase Gasket
8	SS-24	12	3/8-16 x 7/8" HHCS
9	432-325	2	Cylinder (NLA)
10	432-26	2	Head Gasket
11	432-24	2	Cylinder Head (NLA)
12	432-329	1	Exhaust Manifold (NLA)
13	432-337	1	Intake Manifold (NLA)
14	432-336	1	Air Strainer Cover (NLA)
15	43631-009	1	Air Filter
16	SS-2037	1	Wing Nut 1/4" (NLA)
17	SS-3223	1	Cntrsunk Pipe Plug 3/8" (NLA)
18	432-328	2	Aftercooler Elbow (NLA)
19	432-196	10	Gasket
20	SS-10135	8	5/16-24 x 1" SHCS
21	445-94	4	Valve Guide
22	447-236	8	Valve Spring
23	225-25-1	4	Valve Disc
24	445-4217	2	LP Intake Valve Assembly
25	445-360A	8	Jam Nut
26	445-361A	8	Cap Nut
27	SS-6044	8	3/8-16 x 1" Allen Set Screw
28	SS-01767	8	Gasket (NLA) Use 'SS-7424'
29	SS-7424	8	3/8-16 x 5/8" Cap Nut
30	445-89	4	LP Valve Plug
31	432-89	4	HP Valve Plug (NLA)
32	342-128	4	Gasket HP
33	225-28	4	Gasket LP
34	432-94	4	Valve Guide
35	432-236	8	Valve Spring
36	220-25	4	Valve Disc

Item:	Part Number	Qty	Description
37	432-4217	2	HP Intake Valve Assembly
38	SS-31	14	3/8-12 x 2-1/2" HHCS
39	432-41	8	Connecting Rod Bolt (NLA)
40	432-474	4	Connecting Rod Insert (Std)
41	432-4110-2	4	Rod & Cap Assy (NLA)
42	432-9402	2	LP Rod & Piston Assy (NLA)
43	432-9403	2	HP Rod & Piston Assy (NLA)
44	SS-7982	8	3/8-24 Lock Nut
45	432-4205	2	HP Exhaust Valve Assembly
46	432-412-1	2	LP Piston & Pin Assy (NLA)
47	432-4112-1	2	HP Piston & Pin Assy (NLA)
48	KK-9824	2	Ring Kit (Std Size) (NLA)
	KK-9826	2	Ring Kit (.020 Oversized) (NLA)
49	235-23	2	Ball Bearing
50	225-6	2	Screw
51	TIA-5075	1	75 psi Safety Valve
52	SS-1249	2	3/4 x 1/4" Shoulder Bushing
53	432-330	2	Intercooler (NLA)
54	SS-1231	4	3/4" Pipe Plug
55	235-5-1	2	Oil Throw Ring (NLA)
56	432-13	1	End Plate Gasket
57	432-9	1	End Plate (NLA)
58	342-111	1	Oil Seal
59	432-2-1	1	Flywheel
60	SS-10482	1	3/8 x 2" Square Key
61	432-326	1	Flywheel Retaining Washer
62	SS-1508	1	5/8" Medium Lock Washer
63	SS-6883	1	5/8-18 x 1-1/2" HHCS
64	445-333-1	1	Air Strainer Stud (NLA)
65	445-4205	2	LP Exhaust Valve Assembly
66	342-160	1	Felt Washer
67	SS-15	4	Aftercooler Bolt (NLA)
68	235-43	2	Oil Cup
69	432-450	1	Crankshaft (NLA)
70	FM-500	1	Filter Monitor (NLA)

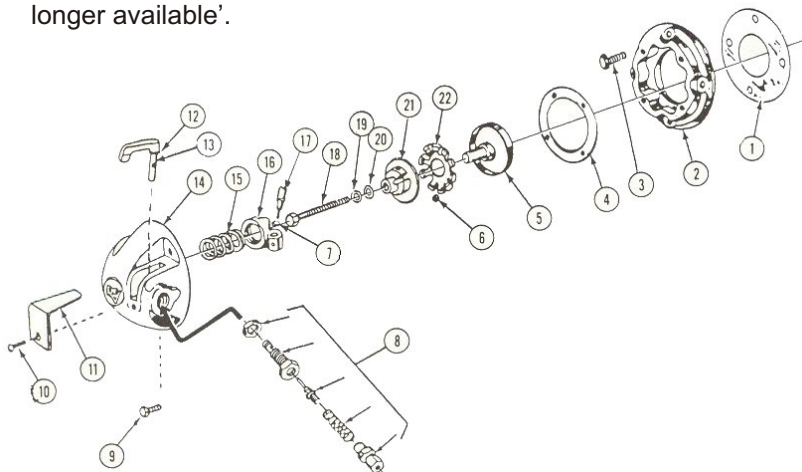
Kits Available for the '432' Pump

Part Number	Qty	Description	Includes
45875-010	1	Complete Gasket Kit	# 4, 7, 10, 19, 28, 32, 33, 56
VRK-642	2	Valve Repair Kit	# 20, 22, 23, 25, 26, 28, 32, 33, 35, 36
OK-432	1	Overhaul Kit	# 40, 48, 58 and (1) '45875-010', (2) 'VRK-642' (NLA)
MK-440	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)

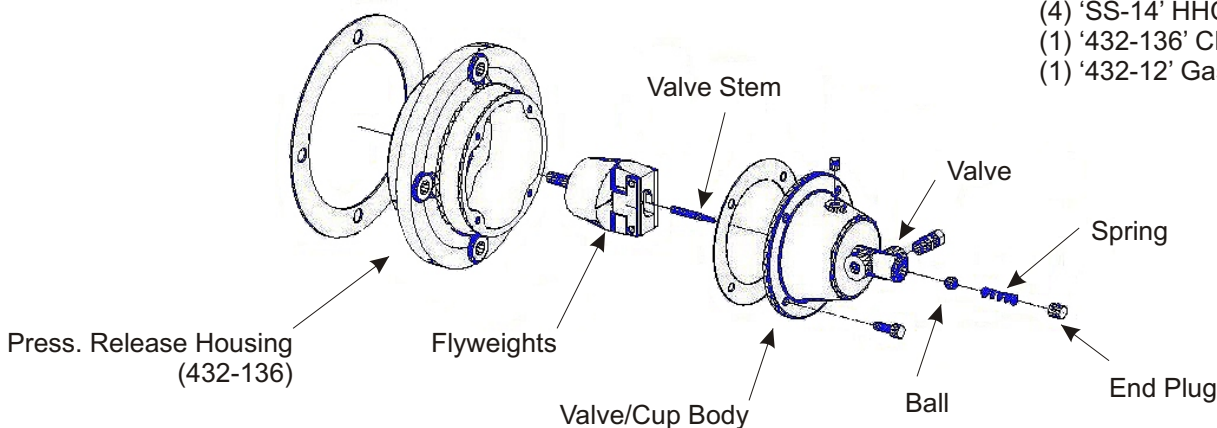
Item:	Part Number	Qty	Description
1	432-12	1	End Plate Gasket
2	432-136	1	Press. Release Housing
3	SS-25	4	3/8-16 x 7/8" HHCS
4	445-144	1	End Plate Gasket
5	230-433	1	Ball Cup Assy (NLA)
6	SS-1555	10	Hard Steel Ball 5/16" Dia
7	SS-3672	1	Lock Washer 3/16"
8	330-430-3	1	Valve Assy
9	SS-9	4	1/4-20 x 5/8" 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 '44643' Series Pump. Order:

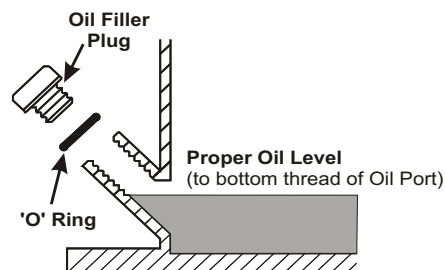
- (1) 'CPR-9700' Kit
- (4) 'SS-14' HHCS
- (1) '432-136' CPR Housing
- (1) '432-12' Gasket



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
6	Small End Plate	144	12	16.2
6	Large End Plate	144	12	16.2
6	Cooler Flange	144	12	16.2
8	Cylinder - Crankcase Gasket	240	20	27.1
24	LP Intake Valve	180	15	20.3
25 & 28	Valve Set Screw	180	15	20.3
26	Cap Nuts	180	15	20.3
30	Valve Plug	-	125	169
37	HP Intake Valve	180	15	20.3
38	Head Bolts	240	20	27.1
39	Connecting Rod - Crank End	408	34	46
43	Connecting Rod - Pin End	120	10	13.5
45	HP Exhaust Valve	180	15	20.3
50	Oil Ring Retainer	144	12	16.2
64	Flywheel Bolts	-	96	130
66	LP Exhaust Valve	180	15	20.3
3	CPR Housing (CPR Assy)	144	12	16.2
14	CPR End Plate (CPR Assy)	72	6	8.1
21	Ball Cam Assembly (CPR Assy)	144	12	16.2

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	3.2500	.0050
	3.2505	.0070
High Pressure Cylinder	1.7500	.0015
	1.7505	.0035

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	2.0000	432-474
	1.9995	
.010	1.9900	432-474-010 (NLA)
	1.9895	
.020	1.9800	432-474-020
	1.9795	

'432' Pump Specifications

Pump Model	HP	175 psi		125 psi		# of Cyl. Bore Stroke			Flywheel Dia. Groove		Pump Dimensions (Refer to drawing) A B C D E F						Weight (Pounds) (Approx)
		RPM	Del'y (CFM)	RPM	Del'y (CFM)												
432	3	440	10.8	470	12.4	4	3.25" & 1.75"	3.5"	20"	2B	23.375"	20"	19.5625"	17.375"	10.5"	8.25"	273
	5	705	18.1	760	19.7												
	7½	880	22.2	975	24.6												
	10	1200	29.0														

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

