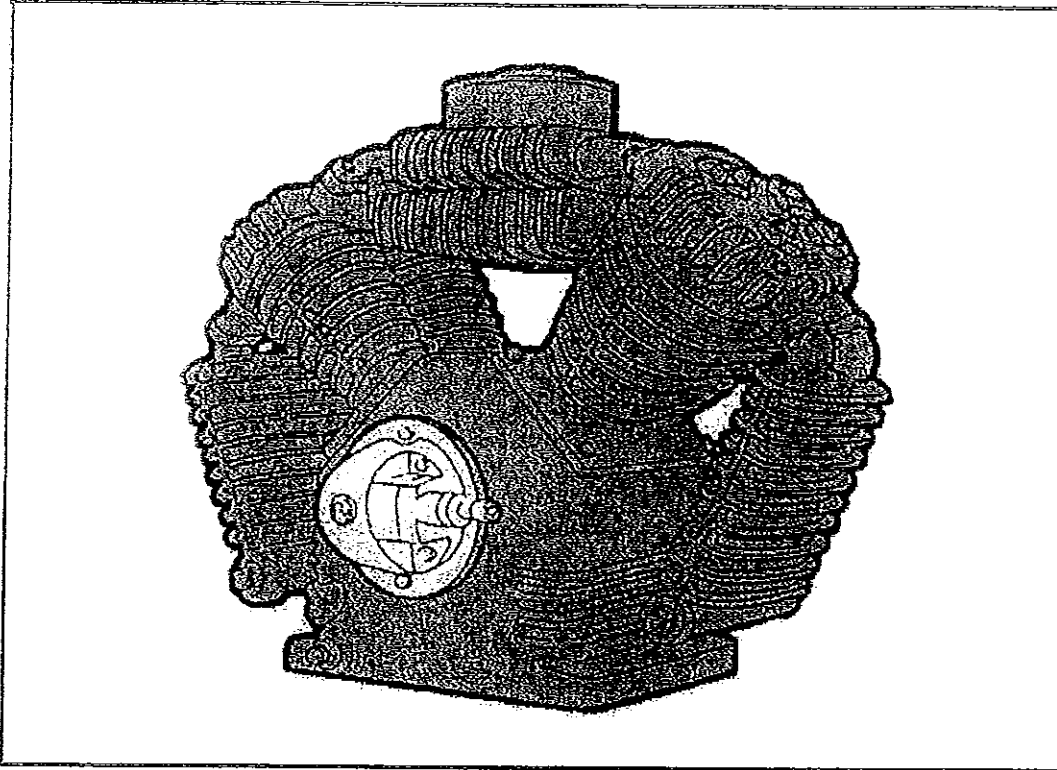




432 Series Compressor Pump

Note: This Pump is obsolete.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



Warning: Check for proper oil level before using this equipment.
Use 20 weight non-detergent oil for ambient temperatures between 40°F and 90°F.
Use 30 weight non-detergent oil for ambient temperatures above 90°F.

Specifications:	Crankcase Capacity:	86 Fluid Oz (2.15 litres)
	Minimum RPM:	300
	Maximum RPM:	1000
	Max. Intermittent Working Press.:	300 psi
	Max. Continuous Working Press.:	200 psi

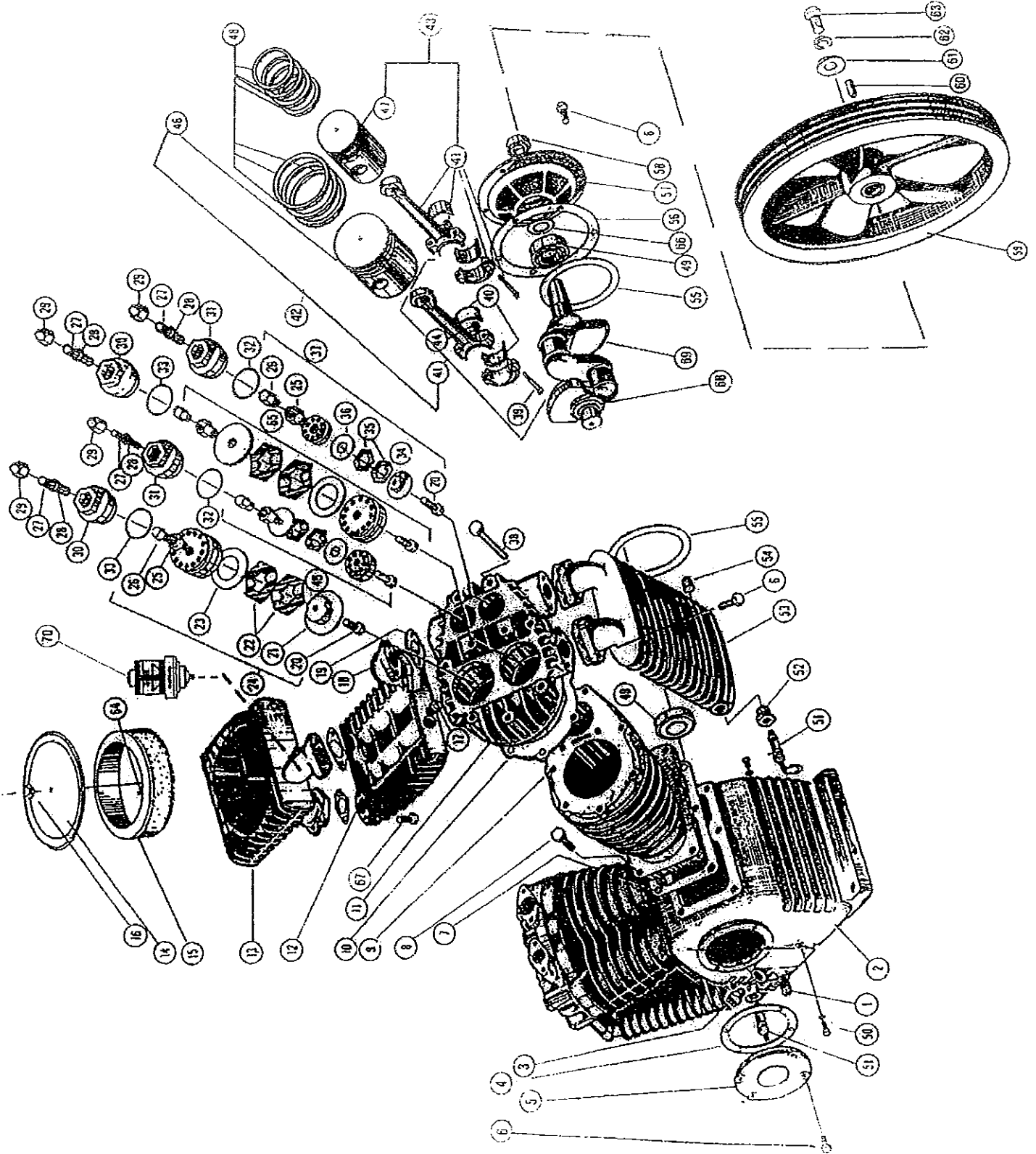
If you require assistance, contact your local Devair Distributor or Authorized Service Centre. If you wish to contact Devair directly or need to locate your closest Distributor, please reach us at :

Phone: (705) 728-5657

Fax: (800) 561-1663

Website: www.devair-compressors.com

Email: sales@devair.ca





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

Item:	Part Number	Qty	Description
1	55-1230	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
6	55-14	26	5/16-18 x 1" HHCS
7	432-327	2	Cylinder to Crankcase Gasket
8	55-24	12	3/8-16 x 7/8" HHCS
9	432-325	2	Cylinder
10	432-26	2	Head Gasket
11	432-24	2	Cylinder Head
12	432-329	1	Exhaust Manifold
13	432-337	1	Intake Manifold
14	432-336	1	Air Strainer Cover
15	43631-009	1	Air Filter
16	55-2037	1	Wing Nut 1/4"
17	55-3223	1	Countersunk Pipe Plug Blk 3/8"
18	432-328	2	Aftercooler Elbow
19	432-196	10	Gasket
20	55-10135	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	55-6044	8	3/8-16 x 1" Allen Set Screw
28	55-01767	8	Copper Gasket
29	55-7424-ZN	8	3/8-16 x 5/8" Cap Nut
30	445-89	4	LP Valve Plug
31	432-89	4	HP Valve Plug
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	55-31	14	3/8-12 x 2-1/2" HHCS
39	432-41	8	Connecting Rod Bolt
40	432-474	4	Connecting Rod Insert (Std)
41	432-4110-2	4	Rod & Cap Assembly
42	432-9402	2	LP Rod & Piston Assembly
43	432-9403	2	HP Rod & Piston Assembly
44	55-7982	8	3/8-24 Lock Nut
45	432-4205	2	HP Exhaust Valve Assembly
46	432-412-1	2	LP Piston & Pin Assembly
47	432-4112-1	2	HP Piston & Pin Assembly
48	KK-9824	2	Ring Kit (Std Size)
	KK-9826	2	Ring Kit (.020 Oversized)
49	235-23	2	Ball Bearing
50	225-6	2	Screw
51	TIA-5075	1	75 psi Safety Valve
52	55-1249	2	1/2 x 1/4" Shoulder Bushing
53	432-330	2	Intercooler
54	55-1231	4	3/4" Pipe Plug
55	235-5-1	2	Oil Throw Ring
56	432-13	1	End Plate Gasket
57	432-9	1	End Plate
58	342-111	1	Oil Seal
59	432-2-1	1	Flywheel
60	55-10482	1	3/8 x 2" Square Key
61	432-326	1	Flywheel Retaining Washer
62	55-1508	1	5/8" Medium Lock Washer
63	55-6883	1	5/8-18 x 1-1/2" HHCS
64	445-333-1	1	Air Strainer Stud
65	445-4205	2	LP Exhaust Valve Assembly
66	342-160	1	Felt Washer
67	55-15	4	Aftercooler Bolt
68	235-43	2	Oil Cup
69	432-450	1	Crankshaft
70	FM-500	1	Filter Monitor

Kits Available for the '432' Pump

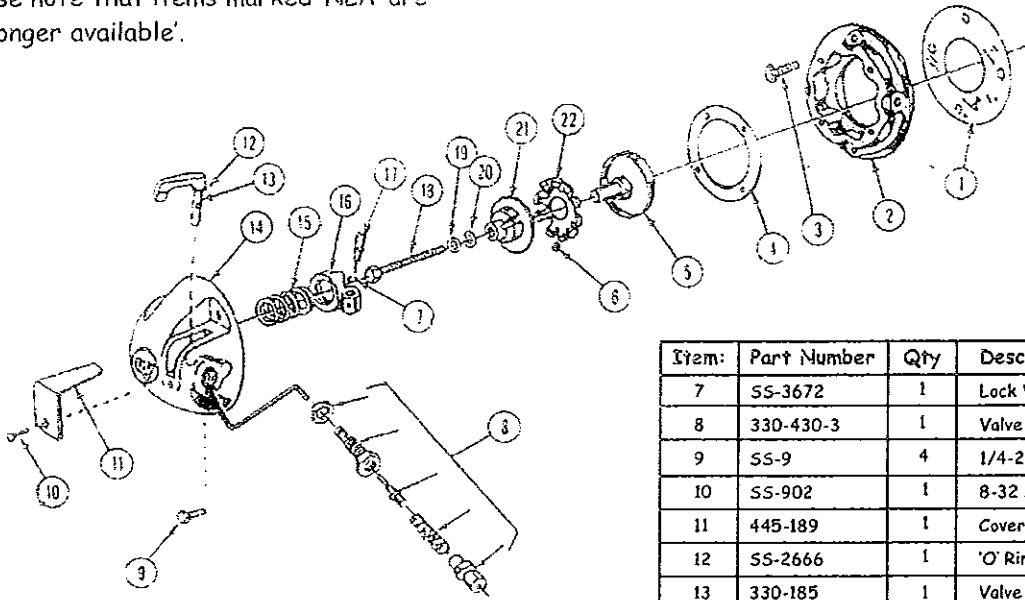
Part Number	Qty	Description	Includes
45875-010	1	Complete Gasket Kit	# 4, 7, 10, 19, 28, 32, 33, 56
VRK-642	2	Valve Repair Kit	# 20, 22, 23, 25, 26, 28, 32, 33, 35, 36
OK-432	1	Overhaul Kit	# 40, 48, 58 and (1) '45875-010', (2) 'VRK-642'
MK-440	1	Maintenance Kit	20 Weight Oil • Filter (for 1 change)



Centrifugal Pressure Release Assembly

Old Style 'CPR' Assembly

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



Item:	Part Number	Qty	Description
1	432-12	1	End Plate Gasket
2	432-136	1	Press. Release Housing
3	55-25	4	3/8-16 x 7/8" HHCS
4	445-144	1	End Plate Gasket
5	230-433	1	Ball Cup Assy (NLA)
6	55-1555	10	Hard Steel Ball 5/16" Dia

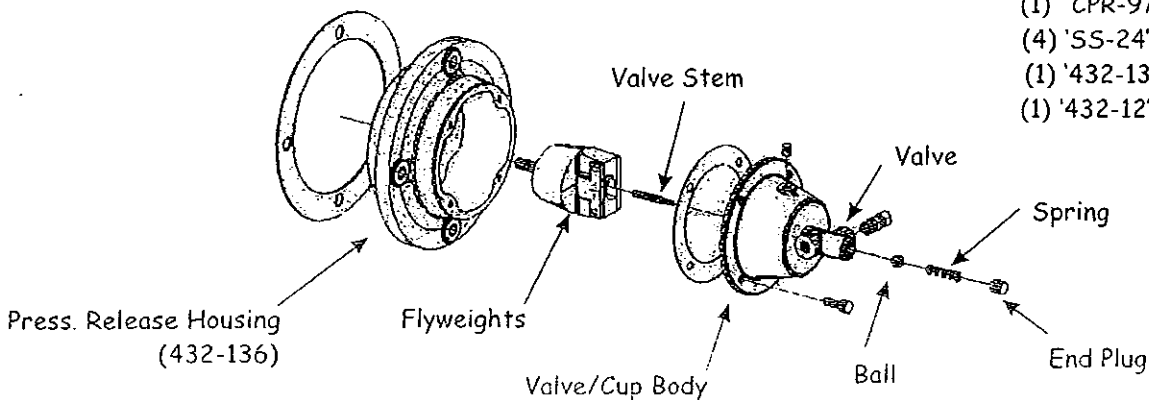
Item:	Part Number	Qty	Description
7	55-3672	1	Lock Washer 3/16"
8	330-430-3	1	Valve Assy
9	55-9	4	1/4-20 x 5/8" HHCS
10	55-902	1	8-32 x 3/8 RHMS
11	445-189	1	Cover Plate
12	55-2666	1	'O' Ring Buna-N
13	330-185	1	Valve lever
14	445-137	1	End Plate (NLA)
15	330-188	1	Return Spring
16	330-183	1	Cam
17	330-184	1	Screw (NLA)
18	55-6914	1	5/16-18 x 2-3/4" HHCS
19	55-1503	1	Lock Washer Med 5/16"
20	330-182	1	Snap Ring
21	330-419-1	1	Ball Cam Assy (NLA)
22	330-139-1	1	Ball Cage (NLA)

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 '432' Series Pump. Order:

- (1) 'CPR-9700' Kit
- (4) '55-24' HHCS
- (1) '432-136' CPR Housing
- (1) '432-12' Gasket





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		Pump Dimensions (Refer to drawing)						Weight (Pounds) (Approx)
		RPM	Delv (CFM)	RPM	Delv (CFM)				Dia.	Groove	A	B	C	D	E	F	
432	3	440	10.8	470	12.4	4	3.25" & 1.75"	3.5"	20"	28	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.

