

# ARB AIR LOCKER *Air Operated Locking Differentials*

## RDCKA & RDCKA24 Air Compressor

ITEM #	QTY	DESCRIPTION	PART #	NOTES
01	1	AIR FILTER COVER	290502	
02	1	AIR FILTER ELEMENT	290503	3
03	7	HEX FLANGE SCREW	200404	
04	1	AIR FILTER BASE	290501	
05	4	HEAD FIXING BOLT	290214	
06	1	INTAKE VALVE RETAINER	290203	
07	1	INTAKE VALVE SPRING	150104	
08	1	INTAKE VALVE INSERT	290215	
09	1	HEAD	290201	
10	1	INTAKE VALVE PLUNGER	290202	
11	1	HEAD O-RING	160214	5
12	1	BARREL	290309	
*	-	BARREL SHIM (0.2mm)	150501	7
*	-	BARREL SHIM (0.4mm)	150502	7
13	2	PISTON RING	290302	
14	1	BACKING O-RING	160213	
15	1	MANIFOLD RETAINING BOLT (M8 x 105mm)	6151174	
16	1	MANIFOLD RETAINING BOLT SEAL	160601	
17	1	MANIFOLD (RDCKA)	290207	
18	1	EXHAUST O-RING	160216	6
19	1	EXHAUST VALVE SPRING	150103	
20	1	EXHAUST VALVE PLUNGER	290205	
21	1	MANIFOLD O-RING	160212	4
22	2	PLUG (1/8" BSPT)	170802	
23	1	PRESSURE SWITCH	CO35	
24	4	HEX BOLT (M6 x 16mm)	6151017	
25	1	COVER PLATE	290404	
26	1	SOCKET HEAD CAP SCREW (M6 x 16mm)	200208	
27	1	PISTON/CONNECTING ROD ASSEMBLY	290310	
28	1	COUNTERWEIGHT	290402	
29	1	MOTOR ASSEMBLY (12V)	290412	1
29	-	MOTOR ASSEMBLY (24V)	290424	2
30	1	MOUNTING BRACKET ASSEMBLY	290604	
31	1	CUP HEAD BOLT (M6 x 25mm)	6151082	
32	1	FLANGE NUT (M6)	6151173	
33	1	COMPRESSOR BACKING PLATE	290603	
34	4	FLAT WASHER (6mm)	6151046	
35	4	SPRING WASHER (6mm)	6151042	
36	4	HEX NUT (M6)	6151031	
*	1	WIRING LOOM (RDCKA)	180405	1
*	1	WIRING LOOM (RDCKA24)	180407	2
*	1	RELAY (12V, 40A)	CO42	
*	1	SWITCH	180209	
*	1	SWITCH COVER (COMPRESSOR)	180212	
*	1	SCOTCH LOCK ELEC. CONNECTOR	CO45	
*	1	TERMINAL (10mm EYE)	CO44	
*	1	BRACKET SCREW (12mm X 18G PST)	6151176	

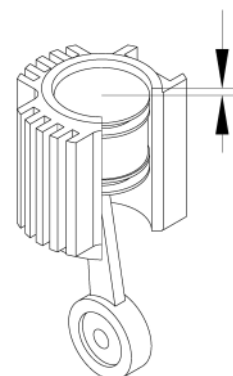
\* Not illustrated in exploded view.

### Specs:

Voltage	12 Volts (RDCKA), 24 Volts (RDCKA24)
Current Draw	No-Load 12A (RDCKA), 7A (RDCKA24) Load 18A (RDCKA), 12A (RDCKA24)
Air Flow	33.0L/min @ 0kPa [1.17CFM @ 0psi] 26.4L/min @ 200kPa [0.93CFM @ 29psi]
Total Weight	4.3kg [9.5lbs]
Size	176mm x 170mm x 170mm [6.9" x 6.7" x 6.7"]
Manifold Port	1/4" npt [Pressure Switch] 1/8" bspt [Solenoid nipple]
Pressure Switch	Open 690kPa [100psi] Closed 490kPa [70psi]
Hose Length	6m [20ft]

### Notes:

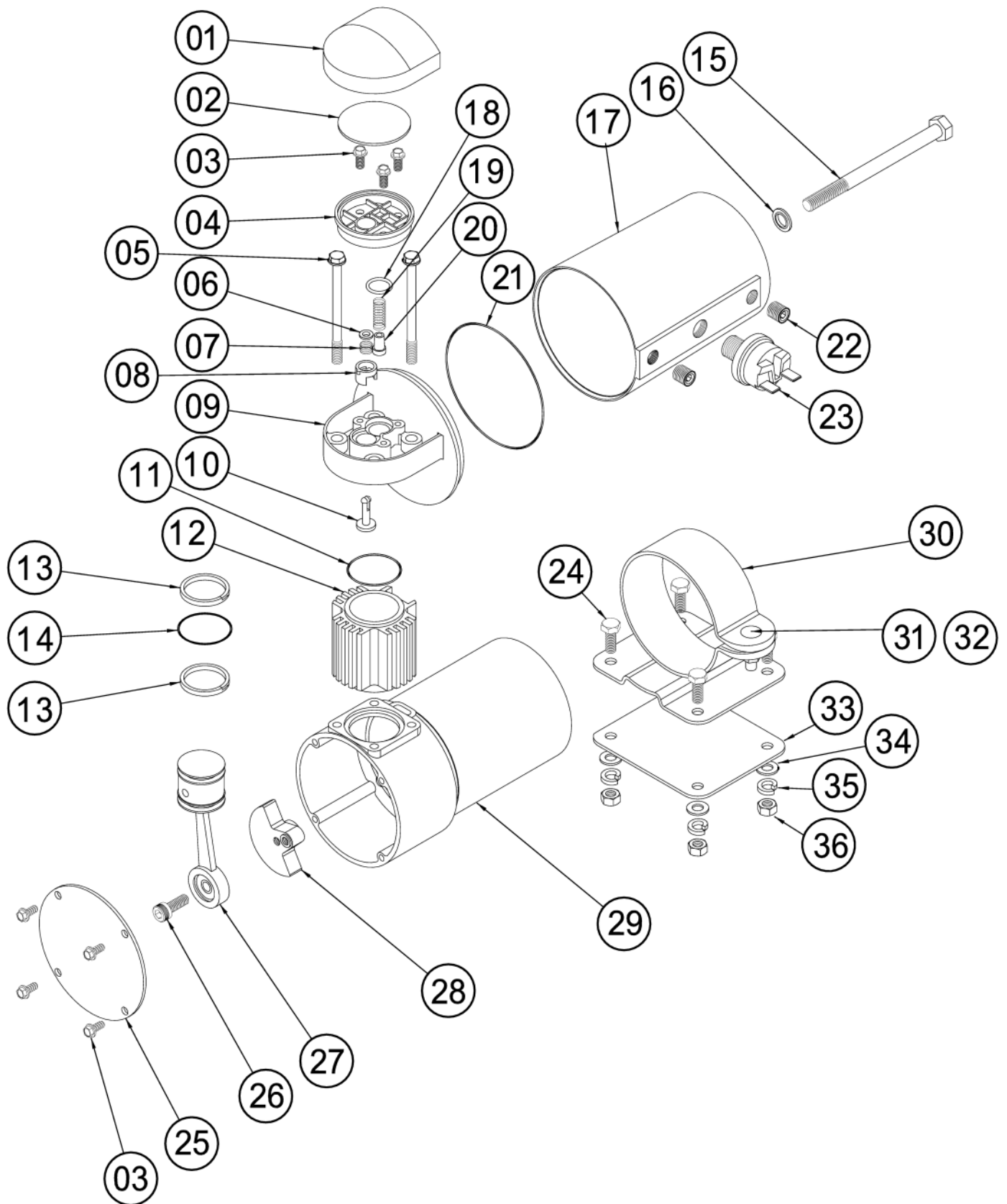
- Used on RDCKA only.
- Used on RDCKA24 only.
- The air filter should be cleaned regularly. To do this, unclip the black cover (01) and remove the element (02). Wash in hot, soapy water, rinse and let dry completely. Reinsert the element into the base (SMOOTH SIDE DOWN), wipe out the cover, and clip back into place.  
  
The compressor manifold must be periodically removed to clean out any condensation, etc. To do this bleed off any residual pressure that may be in the manifold; undo the hexagonal headed bolt at the end of the manifold. Remove the manifold and wipe out any moisture. If there is excessive moisture in the manifold then it should be cleaned out more regularly.  
  
Refit manifold making sure that the O-ring is in its correct position; insert the bolt with the seal under the head. Torque the bolt up to 9.5Nm. Do not over tighten. Run the compressor and check for any air leaks.
- For replacement O-ring use BS041 Viton 75.
- For replacement O-ring use BS025 Viton 75.
- For replacement O-ring use BS014 Viton 75.
- Barrel shims are used to set the deck height of the piston. With the piston at top dead centre (TDC), the deck height is the distance of the piston crown to the top of the barrel (see diagram below). Deck height specification is 0.50mm +0.2/-0.0 [0.020" +0.008/-0.000].



Deck height should measure between 0.50mm and 0.70mm [0.020 and 0.028"]

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## **RDCKA & RDCKA24** Air Compressor – Diagram



# RDCKA & RDCKA24

