

CKMP12

Portable Air Compressor Kit, High Output

| ITEM # | QTY | DESCRIPTION | PART # | NOTES |
|--------|-----|----------------------------------|---------|-------|
| 01 | 1 | SAFETY VALVE FITTING | 320204 | 1 |
| 02 | 1 | SAFETY VALVE SPRING | 150115 | 1 |
| 03 | 1 | SAFETY VALVE POPPET | 320205 | 1 |
| 04 | 1 | HEAD ASSEMBLY | 320102 | 1 |
| 05 | 2 | BOLT (M6 x 60mm) | 200703 | |
| 06 | 2 | O-RING (BS031N70) | 160241 | 2 |
| 07 | 1 | MANIFOLD TUBE (1/4" NPT) | 320224 | |
| 08 | 1 | HOSE COUPLING (US STD FEMALE) | 171402 | |
| 09 | 1 | MANIFOLD CAP (1/4" NPT) | 320214 | |
| 10 | 1 | PRESSURE SWITCH (1/4" NPT) | CO35 | |
| 11 | 1 | BOLT (M6 x 60mm) | 200703 | |
| 12 | 1 | O-RING (BS010V75) | 160242 | 2 |
| 13 | 1 | FLAT WASHER | 6151046 | |
| 14 | 4 | RIVET (3/16" x 1/2") | 6602003 | |
| 15 | 1 | BOLT (M6 x 20mm) | 6151213 | |
| 16 | 1 | MOUNTING BRACKET | 320223 | |
| 17 | 1 | SWITCH (12V) | 180209 | |
| | 1 | SWITCH COVER ('ARB Compressor') | 180212 | |
| 18 | 4 | CAP SCREW (M5 x 10mm) | 200710 | |
| 19 | 1 | NYLON LOCK-NUT (M6) | 6151223 | |
| 20 | 1 | RELAY (12V,40A) | CO42 | |
| 21 | 1 | MOUNT BODY ASSEMBLY | 320107 | |
| 22 | 3 | O-RING (BS032S70) | 160247 | 2 |
| 23 | 1 | VALVE PLATE ASSEMBLY | 320105 | |
| 24 | 1 | BARREL | 320201 | |
| 25 | 1 | PISTON ASSEMBLY (SERVICE KIT) | 320302 | 3 |
| 26 | 1 | AIR FILTER COVER | 320501A | 4 |
| 27 | 1 | AIR FILTER ELEMENT (DISK TYPE) | 290503 | 4 |
| 28 | 1 | AIR FILTER BASE | 320501B | 4 |
| 29 | 2 | BOLT (M6 x 12mm) | 200702 | |
| 30 | 1 | AIR FILTER FLANGE (1/4" NPT) | 320212 | |
| 31 | 1 | O-RING (BS029N70) | 160250 | 2,6 |
| 32 | 1 | CAP SCREW (M5 x 20mm) | 200711 | 3,5,6 |
| 33 | 1 | AXLE | 320203 | 3 |
| * | 1 | RETAINING RING, DIN7993 RW-14 | 6151767 | |
| 34 | 1 | MOTOR ASSEMBLY (12V) | 320104 | 7 |
| * | 1 | CARRY CASE | 270103 | |
| * | 1 | INFLATION ACCESSORY KIT (US STD) | 171303 | |
| * | 1 | HOSE ASSEMBLY (US STD) | 171301 | |
| * | 1 | WIRING LOOM (CKMP12) | 180410 | |

* Not illustrated in exploded view.

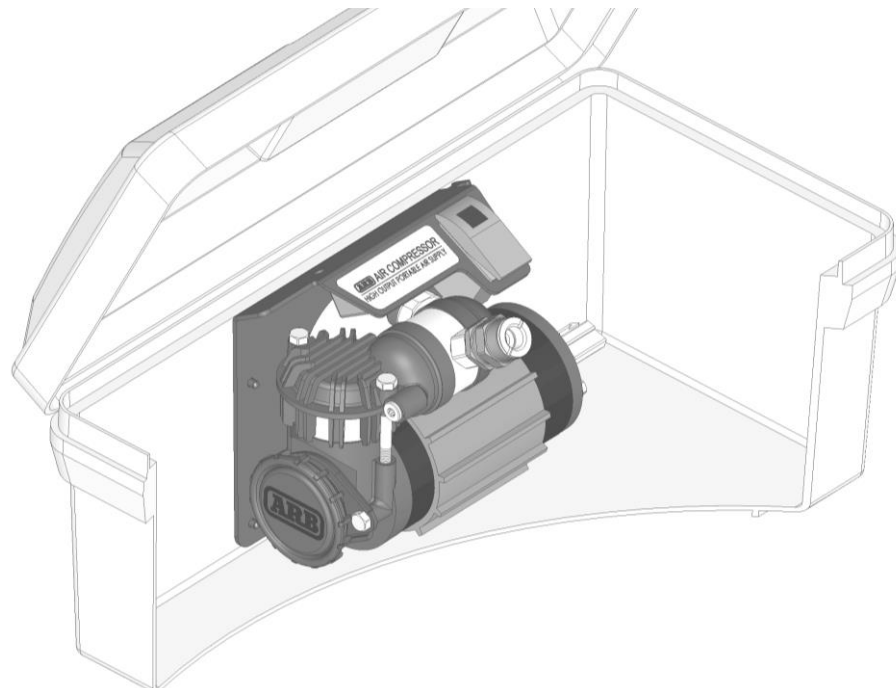
Specs:

| | |
|-----------------|---|
| Voltage | 12 Volts |
| Current Draw | No-Load 13A Load 23A |
| Air Flow | 75.1L/min @ 0kPa [2.65CFM @ 0psi] 61.6L/min @ 200kPa [2.18CFM @ 29psi] |
| Total Weight | 6.5kg [14.3lbs] |
| Size | 208mm x 440mm x 238mm (H,L,W) [8.19" x 17.32" x 9.37"] |
| Manifold Port | 1/4" NPT [Pressure Switch] x 1 |
| Pressure Switch | Open 690kPa [100psi] Closed 490kPa [70psi] |
| Safety Valve | OPEN @ > ~1250Kpa [180 PSI] |

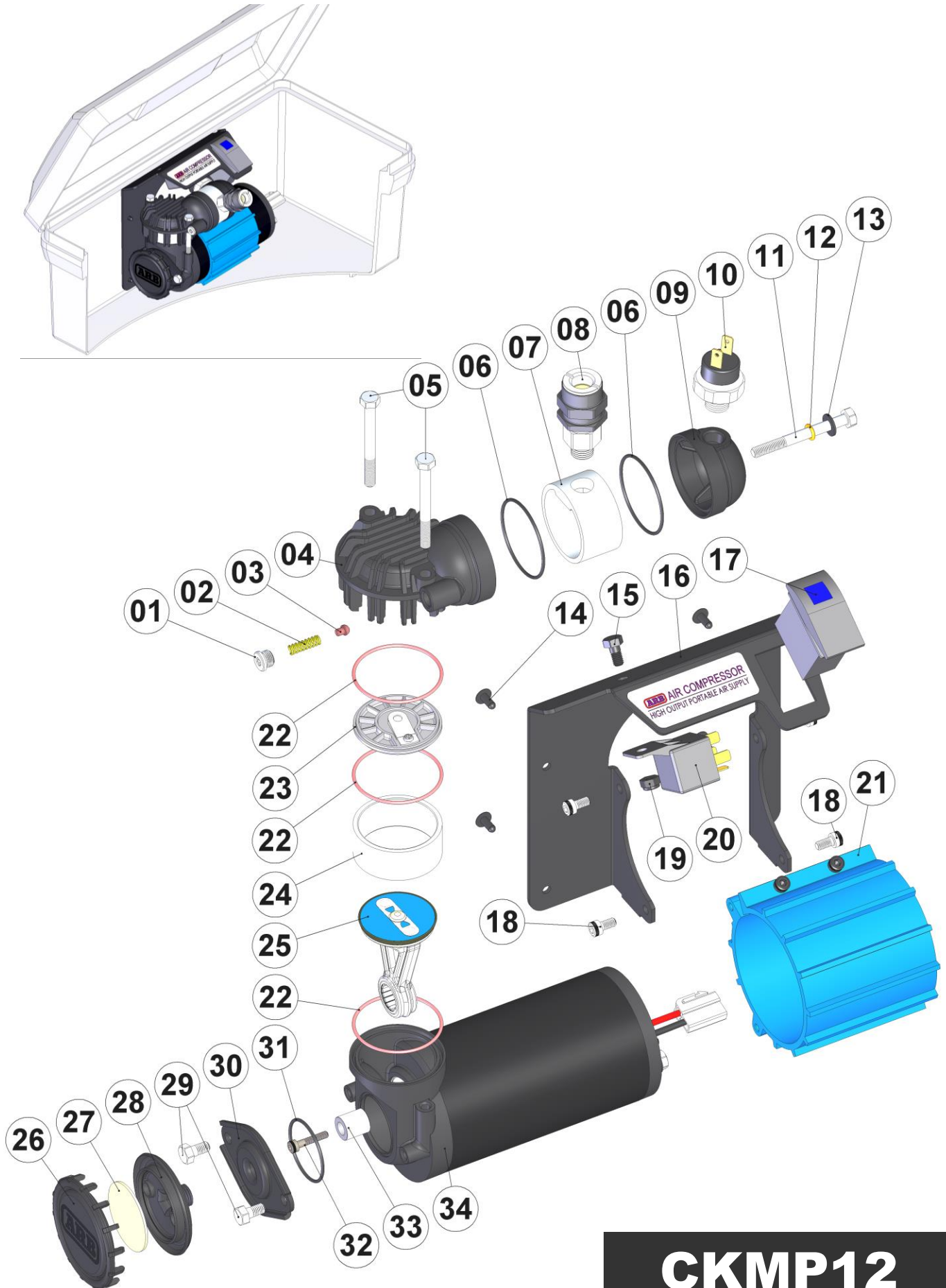
Notes:

- HEAD ASSY (04) comes pre-assembled with safety valve.
- Complete set of O-ring seals is also available as O-ring Service Kit #320301.
- PISTON ASSEMBLY (25) comes only as a service kit also containing the BARREL (24), AXLE (33), and CAP SCREW (32).
- AIR FILTER BASE (31) & COVER (33) available only in AIR FILTER ASSY #320501 which also includes the element.
- Thread lock must be applied to threads of CAP SCREW (32) and then torqued to 10 Nm [7.4 ft-lb].

CAP SCREW (32) should never be re-used once it has been fully torqued once.
- Pre June 2009 CKMP's used O-RING 160243 and CAP SCREW 200708 (M4 x 20mm torque to 6Nm [4.4ft-lb]).
- Motor is serviceable with replacement brushes available as #320111



CKMP12 Air Compressor – Exploded Parts Diagram



CKMP12



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Air Compressor – Detailed Specifications

| GENERAL SPECS | | METRIC | | IMPERIAL | |
|-------------------------------|---------|----------------|-------|----------------|--------|
| SUPPLY VOLTAGE | 12 | Volts DC | 12 | Volts DC | |
| MAX CURRENT DRAW | 32 | Amps @ 690 KPa | 32 | Amps @ 100 PSI | |
| FUSE RATING (Maxi-Blade type) | 40 | Amps | 40 | Amps | |
| RELAY RATING | 40 | Amps | 40 | Amps | |
| WEIGHT (total kit) | 6.5 | Kgs | 14.3 | Lbs | |
| DIMENSIONS | -LENGTH | 440 | mm | 17.32 | inches |
| | -WIDTH | 238 | mm | 9.37 | inches |
| | -HEIGHT | 208 | mm | 8.19 | inches |
| DUTY CYCLE @ 22°C [72°F] | 50 | % | 30 | mins. per hour | |
| PRESSURE SWITCH CLOSED | < 520 | KPa | < 75 | PSI | |
| PRESSURE SWITCH OPEN | > 725 | KPa | > 105 | PSI | |
| SAFETY VALVE PRESSURE | > 1035 | KPa | > 150 | PSI | |
| MOTOR THERMAL CUT-OUT | 115 | degrees C | 239 | degrees F | |
| MAX. AMBIENT TEMPERATURE | 100 | degrees C | 212 | degrees F | |

| NO LOAD SPECS | | METRIC @ 0 KPa | | IMPERIAL @ 0 PSI | |
|---------------|------|----------------|------|------------------|--|
| CURRENT DRAW | 13 | Amps | 13 | Amps | |
| AIR FLOW RATE | 75.1 | L/min. | 2.65 | CFM | |

| SPECS @ TYRE PRESSURE | | METRIC @ 200 KPa | | IMPERIAL @ 29 PSI | |
|-----------------------|------|------------------|------|-------------------|--|
| CURRENT DRAW | 22.9 | Amps | 22.9 | Amps | |
| AIR FLOW RATE | 61.6 | L/min. | 2.18 | CFM | |

| EXTERNAL CONNECTIONS SPECS | |
|---|---|
| AIR INTAKE THREAD (female) | 1/4-18 NPSC (parallel pipe thread) |
| AIR FILTER THREAD (male) | 1/4-18 NPT (tapered pipe thread) |
| PRESSURE SWITCH THREAD | 1/4-18 NPT (tapered pipe thread) |
| SAFETY VALVE PORT THREAD | 1/8 BSPP (parallel pipe thread) |
| MANIFOLD PORT THREAD | 1/4-18 NPT (tapered pipe thread) |
| AIR COUPLING FITTING TYPE (international equivalent standards) | 'US Industrial Standard' ISO 6150 B Rectus series 23/24/1400 Tema series 1400 Legris series 23 DYNAQUIP D3 CEJN 310 US.MIL.C 4109 Norma / AFNOR: NF.E49.053 Parker series 30-1/4" and 20-1/4" Aignep 220 Hansen series 3000 Norgren series 237 Gromelle series 600 |

WARRANTY

This ARB Air Compressor is designed to provide many years of trouble free recreational use, and is warranted to be free from manufacturing defects for two (2) years from the date of purchase.

NOTE : The specifications above were recorded under laboratory conditions @ 22°C [72°F].



CKMP12

Air Compressor – Overview of Design Features

Description:

The ARB CKMP series portable air compressor is a world class recreational product designed and built to commercial / industrial / military standards for the user who values dependability as much as performance.

Features:

- Ultra compact design makes this the highest flowing portable compressor in its class.
- Constructed entirely of light weight, high strength engineering grade materials, including military and aerospace standard components.
- Fully sealed components for moisture and dust resistance.
- Motor is 100% ball bearing equipped, and features a unique linear brush pre-load system for extra long life, low heat and quiet operation throughout the life of the unit.
- Motor is thermal cut-out protected against damage caused by extreme temperature use.
- Pressure switch and 40 amp automotive relay equipped electrical system prevents run-on when not filling, or any damage to compressor or hoses as a result of the pressure generated from a kinked air line.
- Illuminated isolating switch is easy to see at night, and protects the user from hazardous sparking when connecting the alligator clips to the battery terminals.
- Heavy duty Maxi-Fuse equipped power leads for professional in-line circuit protection.
- Hard-anodized cylinder bore and PTFE (Teflon) impregnated carbon fiber piston seal for reduced friction and maximum trouble free life.
- Compressor piston is equipped with a German made high shock rated roller bearing.
- High density and high flow washable sintered bronze air filter element.
- Over-pressure safety valve equipped as a back-up protection from either pressure switch failure, thermal over pressure generated in a hot vehicle (i.e., no need to drain pressure when finished use.), or accidental connection to an external high pressure source.
- CKMP12 is certified compliant to; EN 55014.1 (AS/NZS CISPR 14.1) and meets or surpasses the following Australian and European directives; 2004/108/EC – EMC directive.

**Kit Includes:**

- Fully assembled and performance tested air compressor mounted into a quality tradesman grade hard case.
- OEM quality illuminated compressor isolating switch.
- High quality wiring loom with automotive grade alligator clamp type battery contacts, and a pressure switch driven automotive relay control circuit.
- Splash resistant air filter with washable high-flow sintered bronze filter cartridge.
- 6 meter [20 ft] long high quality abrasion and heat resistant air hose with male to female couplings.
- Hose couplings are specially designed corrosion resistant, one-handed (push-lock) quick connect type to suit US industrial standard air fittings (Ref: compatible types Section 1.3).
- Inflation accessories kit including high-flow tyre filler attachment (US industrial standard) with integral stop-valve, a Schrader valve to US industrial standard adaptor, and extra nozzle attachments for inflating items such as sports balls, air mattresses, etc.

Optional Accessories:

- Pump-up hose extension (part #171301) – a male to female coupling equipped air hose to reach 6m [20 ft] further. (same as the hose included with CKMP12)

